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MODERN THERAPEUTICS.*

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THE tendency of modern therapeutics is toward making use of all measures which tend to the cure of disease, physical as well as pharmacal, and to place reliance upon no single method. While physical therapeutics may seem to be more prominent at the present, it is because the same scientific methods of investigation are being applied as to the study of drugs.

Climate.—There has come a complete realization that the ideal climate for any disease cannot exist. For instance, in the treatment of pulmonary tuberculosis, a dry and equable climate is desirable. But a dry climate can never be equable—a simple proposition in elementary physics—therefore, treatment by climate only is doomed to failure as well as treatment by drugs alone. In this, as in many other instances, a careful study of climate has resulted in a declaration of its limitations, and these limitations must be recognized and provided for.

Mineral Springs.—Here again, intelligent study has done much to do away

with the routine work of the bath-physician and the astute empiricism of centuries is giving place to a well-wrought-out system of therapy, based on special knowledge of the chemical contents of the waters, joined to general medical information. Besides the chemistry of mineral waters, there has come a great advance in our knowledge of the physical chemistry of such solutions and the study of various radio-activities as are associated with mineral waters is opening up another and probably a brilliant chapter in internal hydrotherapeutics.

In hydrotherapy there is but little that is new. Most novelties claimed as such are merely a re-vamping of the old. Curiously enough the practice remains unchanged while the theories upon which it is based have been either abandoned or modified. The Currie-Jurgensen (so-called "Brand") bath, for instance, is no longer used with the idea that it reduces fever, or is a general nervous stimulant, but it is rather employed for the purpose of eliminating various toxins by way of the kidneys.

Electricity.—This is no longer looked

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upon as a cure-all, but definite indications for its employment are well recognized. The high-tension electricity, as developed by Morton in this country, and the use of high-frequency currents, have made electrotherapeutics a much more important chapter and with a much more rational basis than before. The effect of electricity upon the blood-vessels and the consequent stimulating effect on blood-pressure are now well known and show the lines in which this department is going to develop. Static electricity is no longer used merely empirically, but has a definite set of indications, and can be made, under proper conditions and with appropriate directions, to give definite results.

Röntgen-ray therapy is yet in its infancy, but when sufficient time has elapsed that its power for good or evil upon processes and tissues, whether physiological or pathological, shall have been determined, its capabilities will be thoroughly understood. At present its future seems bright.

Diet.—Here, too, distinct advance has been made. The prohibition of red meats in gout and purinemia is now known to be based upon an incomplete understanding of the purin bodies and their forerunners. In diabetes mellitus the judicious administration of carbohydrates has been followed by lessened incidence of coma and by marked improvement of nutrition. A broader knowledge of the nephritic diseases has led to an enlarged dietary which is based upon a clearer understanding of normal metabolism.

Exercise.—That use of a part increases its capacity for developing its function is known, and the application of this principle results in the approach to physiological integrity. Its results in improv-

ing nutrition, are far-reaching, but its limitations, so carefully studied during the past decade, are equally important.

Light Therapy.—Here, again, we find a far too brief chapter. The ascertained facts are few compared with what will be known. As they accumulate and logical deductions are made, our therapeutic resources are likely to be enormously augmented.

Pure Drug Therapeutics.—Drug therapeutics, although of earlier development, has lagged somewhat behind physical and mechanical therapeutics as regards its establishment upon a firm, rational basis. There is no doubt now that the new physical chemistry, the most brilliant chapter in chemical development at the end of the nineteenth century, will soon remedy this defect. Already this has been accomplished for familiar drugs and the end is not yet. At the beginning of the nineteenth century the use of all drugs was based upon empiricism. As the result of German nihilism, unfortunately there was for a time in scientific hands, a neglect of drugs that kept therapeutics in the background, while pathology and other departments of medical science were advancing with giant strides. Even at the present time many so-called text-books of medicine are scarcely more than treatises on pathology. With regard to treatment very little is said. So much is this division of the book overshadowed by the rest that often it occupies brief paragraphs where the other branches of the subject have pages devoted to them. This, of course, is not as it should be, since a text-book on medicine must be helpful not alone in the recognition of disease, but especially for its cure, so far as that is possible,



From male fern Jaquet isolates filmaron as the tenicide. Dose 10 grains; to be used with care, as it is very active.

In amebic dysentery Tuttle found enemas of cold water as useful as when medicated with silver, etc.—*Ther. Gaz.*

and for its alleviation, if cure cannot be obtained.

Basis of Drug Therapy.—Drug therapy is now being put on a secure basis, by observations in the laboratory, not only from its suggestions, but as well from its confirmations of clinical observation. This does not change the views with regard to the employment of remedies, but often helps to make it clear how they may be used with better effect. Digitalis is now used on a very different theory from that on which it was originally introduced, but the indications for its employment are the same as when Withering first wrote with regard to it in 1784.

The most hopeful suggestion with regard to present-day drug therapeutics lies in the development of physical chemistry. It is but a few years since Faraday introduced the word *ion* and the idea which it conveys. Only now is this idea bearing fruit in a new science of chemistry. In the days when Lister recommended phenol as most important for securing asepsis, the material was employed in solution in various substances. However, by observation it came to be known that in oily solution phenol did not inhibit bacterial growth. It was not until the application of Faraday's theory to chemical compounds brought out the fact that electrolytes are not set free when in oily solution, that the real explanation for this failure of phenol, under these circumstances, could be understood. The reason for the use of alcohol as a direct antidote for phenol is now clear. The same explanation has been found to be helpful with regard to solutions of mercury, and even with regard to many biological phenomena where it might be least expected to have its application. The action of toxin and anti-

toxin on one another are phenomena of ionization. These phenomena can now be measured with exactness by the modified Wheatstone bridge, as has been demonstrated, and Kohlrausch has determined the conductivity of fluids with reference to their contained electrical units.

Chemical Constitution.—The physiologically opposite results from the introduction of a methyl-radical are striking (strychnine, convulsant; methylstrychnine, paralyzant). The effect of change of position of a radical may be striking as resorcin (metadihydroxy-benzene) is very sweet, while pyrocatachin (orthodihydro-benzene) is bitter. The atomic weight seems to influence toxicity, as in the alcohols it increases from methyl- through ethyl-, propyl-, butyl- to amyl-alcohol. In the synthesis of hypnotics the varying effects of radicals upon different portions of the brain being known and the result of placing the various radicals in the ring, the construction of a safe and reliable hypnotic has become possible.

Empiricism.—It must not be forgotten that at various times varying explanations for the action of a drug may be offered and accepted, and yet the truth as to its real therapeutic effect not be known until the real cause of the disease has been recognized. So long as a valid explanation is not established, remedies must be employed on the basis of clinical experience.

Until Laveran discovered the cause of malaria, it was impossible for therapeutists to give the true reason for the action of quinine in the disease. Much had been said about its supposed effect on fever, and of its effect on the white blood cells, but it was when it had been

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In the Slavic tongues the word Slav signifies glory or glorious. But in the world's esteem the name Slav means just slave.

The Cossack is said to drink blood, and during the Turkish war to have really lived on his enemies' blood.

found that it acted unfavorably upon the *plasmodium malarie* that the real explanation became evident. The empirical fact of the usefulness of quinine was undeniable. The explanations offered for its effect, however, were many and had to be changed with the progress of science until at last truth came, and its employment was placed on a scientific basis.

Simplicity of Therapy.—The tendency in drug therapeutics is away from complex prescriptions and ill-assorted combinations. The "what" is first determined, then the "how much" and finally the "when." Thus, having carefully chosen the remedial agent, the question of dosage is settled, and finally the dose interval. This implies a thorough knowledge not only of effect, but of rate of absorption and elimination. In this way a definite effect is produced.

Number of Drugs.—Old customs in medicine seem to counsel not only many drugs, but very frequent administration. One remembers distinctly in hospital treatment the usual practice of one medicine given before and another after meals, regularly three times a day, with a sleeping draught at night and a laxative potion in the morning. Altogether the patient looked to eight different times at which some drug was to be administered. Undoubtedly this had a good suggestive effect, whenever it was not undone by the action of the medicine. Certainly the modern practice is more in accord with the teachings of pharmacology.

Formularies.—These and the "disease indices" of works on *Materia Medica*, should be abolished since they lead to routine prescribing and, ignoring the particular patient, are not the best expres-

sions of therapeutic skill. This statement applies even more strongly to the literature of this kind emanating from manufacturing chemists.

Students and Drug Therapeutics.—The question is often asked why medical students do not know more about therapeutics, since, as a rule, most of them are anxious to learn what to do for disease and yet, they are graduated without practical training in the use of remedial agents. In the schools there is too much teaching of the theory of treatment and too little demonstration of the practical working of drugs either on animals or on patients. It has been recently well said that "the teaching of therapeutics a few years ago, even in good medical colleges, was apt to be rather farcical. The professor did a good deal of reading of facts and dry lecturing with regard to drug action, until the student finally procured a compend, memorized the matter and passed his examination. With regard to clinical application of drugs, so little was taught, that the student carried away next to nothing. The professor of clinical medicine spent nine-tenths of his time in the discussion of diagnosis and etiology and of pathology, and said only a few brief words with regard to treatment at the end. Some men who obtained hospital work were given a training at the hands of distinguished clinical observers, but found that their use of drugs was entirely empirical, and had very little reference to scientific drug action, as stated by the specialist in therapeutics. At the present time a change has come over that sort of teaching. But the medical student of today is eminently to be pitied. He is in the midst of three fires. There is the laboratory man who wants most of his



The probability of action by the Anglo-Saxon, the German or the Kelt, may be estimated; the Slav is an unknown quantity.

The criticism hardest to meet is that which is based on misconception which refuses to investigate.

time; the professor of clinical medicine, who wants him at the bedside for many hours a day; finally, there is the specialist who considers that the only hope for practical medicine is in the devotion of more time to the specialties."

Teaching of Therapeutics.—Since this is so, there should be some method devised by which not only shall the student be able to acquire the requisite information during his period of tuition, but that he shall so thoroughly acquire it that he may become a better practitioner of the most important division of medicine, namely, Therapeutics. Without sacrificing the fundamentals upon which the structure of medicine must stand, a logical system must be insisted upon so that the opprobrium of the schools shall no longer exist. It would seem that this can best be accomplished by the following plan covering the four years of tutelage:

1. A practical acquaintance with various remedial physical measures and remedies, not less physiological, and methods of preparing the latter. This should be acquired during the early and mnemonic period of the student's career (recitation and demonstration).

2. Actual knowledge of the action of agencies and remedies acquired by personal experimentation and demonstration under the teacher's eye (laboratory demonstration).

3. Application of these agencies and remedies, the actuality of their effects for good or evil having been fixed in the student's mind, in the treatment of diseases and symptoms, under proper supervision (lecture and clinical demonstration).

4. The accurate direction for the exhibition, in strict pharmacopoeial nomenclature, of remedies and the scientific use

of physical agencies must be so thoroughly comprehended by the student that he can not only intelligently apply them, but give valid reason for his treatment (clinical practice and conference).

Pharmacopoeia.—While the profession in America had an excellent pharmacopoeia, one that is generally considered more valuable than that of any other nation, not excepting any, very few physicians have been sufficiently familiar with it. In fact, it is apparent that a very large proportion of practising physicians do not know the pharmacopoeia because they have been deterred by the supposition that it is of great size (confounding it with the various dispensaries), while it is really a comparatively small book, yet containing, well-arranged, not only a sufficiently complete armamentarium, but also some indispensable information, which a physician should have who is intent on prescribing rationally and without the supposed aid thrust upon him by overzealous manufacturing chemists.

Pharmacopoeial Development.—The United States Pharmacopoeia was first formally planned in 1817, when it was decided that some legal standard was required for drugs and drug preparations, which should have national authority. Until 1840 it continued to give the text in both Latin and English, but since then it has been published only in English. Every ten years, as the result of invitations to medical schools and societies and pharmaceutical schools and societies, and the medical departments of the Army and Navy, a committee of revision is selected, consisting of twenty-five members, who see to the elimination of drugs that are no longer used and to the introduction of remedies of various



When men cease to write prescriptions and use single remedies for single needs the beginning of scientific therapy will be seen.

Our chiefest heresy is urging physicians to study the book of Nature instead of the "manual of diagnosis."

kinds, that have been introduced to medicine during the preceding decade. The book thus made is the legal standard, and is adopted by the Treasury Department (Custom House), the Army and the Navy, as well as by most of the States, as the court of final appeal for formal and legal information with regard to drugs. The next revision which is shortly to be issued, will contain besides much additional information, the average adult dosage of the various drugs and remedies that are incorporated in the pharmacopeia. From various sources suggestions have come that this revision be translated into Spanish. If this is not an opportune moment for a Pan-American Pharmacopeia, at least this much is evident: a Pharmacopeia produced by representatives of the three Americas, with text in both Spanish and English, would be a potent factor in harmonizing the therapeutic practice of the western hemisphere.

Therapeutic Successes.—Those who are discouraged with regard to therapeutics should remember some of the facts and statistics of present-day treatment. Formerly seventy-five per cent, of patients attacked by laryngeal diphtheria, died. Now between serum and intubation, or both, together with other proper remedial measures, seventy-five per cent recover. The former death rate from ty-

phoid fever in hospital treatment was eighteen per cent. Now, under the use of intestinal antiseptics, the mortality is not more than two per cent. As the result of the use of quinine, ninety-five per cent of the patients suffering from amebic dysentery recover, though formerly this was a very fatal and persistent disease. In acute polyarticular rheumatism, under the proper use of the salicylates, the disease lasts days instead of weeks. In acute infectious pneumonia, properly treated, the mortality should not be more than five per cent.

But few instances of the enormous progress which therapeutics has made, need be cited. Those whose practice is guided by the methods, and who make use of the agencies of modern therapeutics, are conversant with the brilliancy of the crowning triumphs of modern medicine.

New York City.

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We regret that this able endorsement of modern therapeutic methods as determining great therapeutic advancement was not presented in time for editorial announcement in advance; but here it is, a glowing tribute to success along these lines, a strong, able appeal for strenuous endeavor to better things.—Ed.



SOLANINE: AN IMPORTANT ALKALOID.

BY WILLIAM F. WAUGH.

THE ESSENTIAL ACTIVE PRINCIPLES OF *DULCAMARA* AND *SOLANUM CAROLINENSE*.

WHILE Bocquillon - Limousin terms solanine a glucoside he gives it the formula $C_{60}H_{71}NO_{32}$. It is found in the *Solanum dul-*

camara, ferox, lycopersicum, Carolinense, nigrum, the young shoots of the potato and the tubers that have been exposed to the light, and those that have sprouted,



Prescribe for what you see to be evidently wrong; diagnosis comes later; but don't say we discourage it either.

Diagnosis cannot be too careful or thorough; but prescribe for the abnormal conditions that are most evident.

and possibly in *Scopolia*. The deeper layers of potato skins contain, at some periods of their growth, enough to cause toxic symptoms (Riley). Boiling water extracts the poison, and that in which potatoes have been boiled may prove toxic.

Solanine may be prepared by expressing the juice of etiolated potato germs, adding lime-milk or ammonia, in excess, which precipitates the solanine. This is separated by filtration, the insoluble part dried, and exhausted by boiling alcohol, which deposits crystallized solanine on cooling (Desfosses). It is a glucoside as dividing into glucose bodies, an alkaloid as to its basic properties (Merck).

Solanine occurs in fine, silky needles, colorless, possessing the properties of the alkaloids. It is insoluble in water, slightly soluble in ether and in cold alcohol. It melts at 240° F. It has a feeble alkaline reaction and forms salts with acids. Submitted to the action of boiling dilute mineral acids it splits into three equivalents of glucose and an alkaloid, solanidine, $C_{50}H_{41}NO_2$. Treated by an amalgam of sodium and water it gives nicotine, $C_{20}H_{14}N_2$, and butyric acid $C_8H_8O_4$.

Solanine has the property of forming a gelatinous mass with amyl alcohol when cold, even in the proportion of one part to 2,000. Cool amyl alcohol is the best solvent for solanine.

Brunton says that solanine in warm-blooded animals paralyzes the central nervous system without affecting the peripheral nerves or the voluntary muscles. It slows the heart and respiration, lessens sensibility, and causes death with convulsions. The temperature constantly falls. The pupil is unaffected. It produces weakness, labored breathing, nausea, vomiting and drowsiness, but no true

sleep. There is no increase of action on the part of the bowels, kidneys or skin.

Nothnagel gives the formula of solanine as $C_{43}H_{71}NO_{10}$. It paralyzes the central nervous apparatus, causing general paralysis, reduces heart and lung action, and kills by asphyxial spasms. In man it also causes nausea and vomiting. French physicians have employed solanine as a nerve calmant, and analgesic, especially when it is desired to affect the medulla or the cord, as it lowers the irritability of both motor and sensory nerves.

Pictet gives the composition of solanine as $C_{22}H_{75}NO_{15}$. It contains no methoxyl, but six hydroxyl.

Spiegel, in Liebreich's Encyclopedia, gives the formula as $C_{52}H_{93}NO_{18}$ plus $4\frac{1}{2} H_2O$. He designates it as an alkaloid. The salts are mostly amorphous and freely soluble in water or in alcohol. Much water decomposes them, setting the base free. An amorphous alkaloid, solanine, accompanies it (Firbas). In the ripe potato there is but about 0.005 per cent to be found, but in the eyes (sprouted) there may be as much as 0.5 per cent. Solanine, like the rest of the saponine group, is an energetic protoplasmic poison, one per cent in solution preventing the development of bacteria and the coagulation of the blood, and dissolving the blood elements (Perles). The lethal dose *per os* is 0.3 per kilo of body weight—3 to 10,000—and about 0.1 per kilo subcutaneously. In rabbits Husemann noted a reduction of temperature of over five degrees F., with muscular tremors, spasm of the jaw muscles, respiration rapid, then slowed, dyspnea and fall of cardiac energy. Then followed tonic-clonic convulsions, mydriasis and death from suffocation. The heart beat



If you remove all the symptoms by treatment, will there be any disease left? If so, you have not removed all symptoms.

Direct therapy at the most prominent symptom; then at the worst one remaining; till none is left.

after the cessation of respiration, and stopped in diastole. He affirmed that solanine does not irritate the stomach, bowels or subcutaneous tissues, but Perles noted after intravenous injections severe enteritis, attributed to the poison excreted into the intestine; and also recent parenchymatous nephritis. The urine contained hemoglobin, methemoglobin, albumin, casts, and a few red blood cells.

Von Schroff found toxic symptoms in human beings follow doses of gm. 0.2, or three grains; such as yawning, dizziness, stupor, somnolence but not sleep, tonic spasms, rapid small pulse, difficult respiration, nausea, salivation and extreme weakness. The effects of solanidine differ only in mydriasis and elevation of temperature.

Experimenting on animals, Perles found the same symptoms and post mortem appearances as after sapotoxin. Solanine did not cause diarrhea as the toxic plant did, possibly because the alkaloid was absorbed from the stomach while the crude plant was carried into the intestines. But solanine is more apt to affect the kidneys, as albumin and hemoglobin are generally found in the urine. Given to a dog, very little solanine or solanidine was found in the feces or urine, so that it is probably broken up in the body.

Caylus calls attention to the renal congestion caused by solanine and the plants containing it; also to the occasional diuresis, the tetanic spasms of the thoracic muscles, and increased sensitiveness of the cutaneous nerves; but he denies any direct influence upon the brain, stomach or bowels. He locates the action on the cord and medulla.

Solanine possesses an anesthetic power



What a giant among practitioners would be the one who studied conditions and their treatment, exclusively. A doctor indeed.

over the extremities of the pulmonary plexus, lessening the sensibility of the bronchial mucosa, and slowing respiration. At first it moderates the pulse, then accelerates it. It irritates the stomach, large doses causing vomiting, colic and constipation. Small doses are laxative. It also possesses narcotic properties (Bocquillon-Limousin).

Cushny states that the action of solanine is almost identical with that of sapotoxin; solanidine differing only in not being a local irritant. While in potato sprouts growing in damp cellars the quantity of solanine rapidly increases, and it is also present in rotting potatoes, most cases of poisoning occur from the use of the small green unripe tubers that have been exposed to the sun at the surface of the ground. As the skins contain nearly half the solanine, if these are removed before boiling, much of the alkaloid in the edible part is removed by the water. The young buds arising from the potato contain enormous quantities of the poison.

Schmiedeberg describes an epidemic of potato poisoning, the symptoms being headache, colic, vomiting, diarrhea, depression, mental confusion, in severe cases pallor or cyanosis, dilated pupils, short periods of unconsciousness with rapid and then slow pulse, and in many cases a rise of temperature. All recovered within ten days.

In fatal cases of poisoning by plants containing solanine as their toxic principle, it has caused gastrointestinal irritation; an acrid burning sensation in the throat as the first symptom, followed by great restlessness, muscular and fibrillary tremors, labored respiration, dryness and hyperesthesia of the skin, rapid pulse, collapse and coma, the temperature fall-

The salvation of pharmacy does not lie in the sale of Peruna for 80 cents instead of 73 cents.—*Critic and Guide*.

ing markedly before death. The pupils are generally dilated. Albuminuria is usual. The fatal dose is unknown, but six grains would probably be uniformly fatal. The stomach should be washed out, after emptying it, strong tea or coffee given, the temperature sustained by artificial warmth, and opiates used for gastrointestinal irritation. Pilocarpine is said to have given good results. There is no chemical antidote (Riley).

Pfuhl saw many cases of poisoning among soldiers who had eaten toxic potatoes. Fifty-six showed similar symptoms, such as chills, fever to 100° and 103° F., headache, violent colic, diarrhea, severe fatigue, sometimes nausea, vomiting and fainting. Slight jaundice was present in some. The fever declined within three days, and recovery ensued. The treatment consisted in rest in bed, an ice-bag to the head, warmth to the abdomen, calomel, mint tea and opiates. The potatoes contained six times the usual quantity of solanine. It is not stated whether they were sprouted, green or rotten. In the latter case another element would enter besides the solanine—the products of decomposition.

Geneuil recommended solanine as a substitute for morphine as an analgesic in neuralgia, gastralgia and rheumatism, but the action was not reliable. This is true also as to Sarda's application of it in diseases of the central nervous system; and Fronmueller's in agrypnia. But in symptomatic and hysteric asthma, and in whooping-cough, Clarus and Caparoni found solanine reliable. The action here is both direct and reflex upon the nerve centers.

Desnos employed solanine for painful maladies of the stomach, in doses of gr. 3-4 half an hour before meals, with bene-

fit in gastralgia, painful dyspepsia, alcoholic gastritis with or without dilatation of the stomach, gastric ulcer and cancer. It has also proved useful in neuralgia, locomotor ataxia, asthma, muscular rheumatism (myalgia), chronic bronchitis, and the vomiting of pregnancy (Shoemaker).

Solanine has been employed against sciatica, neuralgia, rheumatism, gout, cystitis, cardiac asthma, bronchitis, whooping-cough, all spasmodic affections, pains of the stomach, dyspepsia and prurigo (Bocquillon-Limousin).

Caylus recommends solanine acetate in doses of gr. 1-6 to 1 for pulmonary maladies with spasm or irritation.

Constantine Paul recommended solanine in doses of a decigram—gr. 1 1-2—in pill, cachet or syrup. Hypodermatically he gave solanine gr. 20; acid hydrochloric gtt. two; distilled water to five drams—15 minims containing gr. 1 1-2 at a dose. But Bocquillon-Limousin undoubtedly employed a better product, for he places the dose for an entire day at from gr. 1-4 to 1-2.

Merck gives the dose of solanine and the hydrochlorate as 0.01 to 0.06—gr. 1-6 to 1—as a single dose; maximum 0.1 per dose, 0.5 per diem—gr. 1 1-2 per dose, 7 1-2 per diem. He suggests tannin as an antidote. Hypodermatically the hydrochlorate may be given in watery solution up to gr. 5-6 at a dose.

Spiegel gives the dose of the hydrochlorate or the acetate as 0.04 to 0.08—gr. 2-3 to 1-13—three or four times a day.

The first evidence of solanine action seems to be the acrid burning in the throat, decided toxic action being denoted by oppression of the respiration. The first-named symptom then, would indi-



May you be saved from falling into either deplorable extreme, over-drugging and therapeutic nihilism.—*Critic and Guide.*

To our enemies—enemies of Truth, Justice, Freedom and Fair Play: I wish rope enough! That's all they need.—*Critic and Guide.*

cate the full therapeutic effect, and the remedy should then be discontinued or given only as this symptom subsides. The alkaloid is very soluble as a salt, and hence its effects are quickly manifested. The proper adult dose may therefore be placed at gr. 1-12, to be repeated every half hour till the burning throat indicates full effect. Or, a granule containing gr. 1-24 might be given every ten minutes for the acute pains of neuralgia or the paroxysm of asthma. For children with whooping-cough gr. 1-67 every half to two hours would seem to be the proper dosage to begin with; increased as per effects. Solanine poisoning should be treated by atropine and strychnine after emptying the stomach. The effects do not last very long, but just how long is yet to be determined.

Of the plants containing solanine dulcamara is probably that most frequently employed. It contains also an alkaloid dulcamarine, whose properties are unknown (Brunton). Poisoning by dulcamara causes skin eruptions with duskiess and itching; vomiting, dizziness, convulsions, abdominal pains, thirst, heat and dryness of the throat, rapid respiration and pulse, and vital prostration. In ordinary doses it acts as a sedative and mild narcotic. A distinct anaphrodisiac effect has been noted. Overdoses call for washing out the stomach with warm water and mustard, hypodermics of morphine and atropine, and diffusible stimulants by the mouth. Dulcamara is thought to be of service in scaly skin diseases, the recent decoction in rheumatism, and acute respiratory catarrhs; the extract has been given for mania, especially nymphomania and satyriasis (Shoemaker).

Ellingwood recommends dulcamara for

acute respiratory catarrhs, pulmonary congestion, chest pain, an excellent auxiliary in acute bronchitis; usefully influencing the cutaneous manifestations of syphilis and scrofula; nervous irritation with depression, hyperesthesia, pruritus pudendi give small doses and increase.

Dulcamara has been employed in scaly skin diseases, with antimony; and Husemann recommended it in chronic bronchial catarrh, asthma and whooping-cough (Brunton).

Lloyd terms dulcamara a mild narcotic, diuretic, alterative, diaphoretic and discutient; depressing the circulation in some persons, with lividity of the skin, dizziness and heaviness of the head, besides the symptoms elsewhere described as due to solanine.

Lloyd recommends dulcamara for mania with powerful sexual excitation; though it is said to occasion venereal desires, with heat and itching of the female genitals, and strangury; acute troubles due to colds; chronic skin diseases, pustular, vesicular or scaly syphilis, rheumatism, cachexias, ill-conditioned ulcers, scrofula, indurations from milk, leucorrhea, jaundice, obstructed menstruation; especially scaly affections like leprosy, tetter, eczema and porrigio, with guaiac and yellow dock; for catarrhs give fractional doses; suppressed menses with headache, nausea and chilly sensations, from exposure to cold; dyspnea, cough and chest pain from exposure; headache from acute catarrh, coryza, retrocedent and tardy eruptions; vesical catarrh aggravated by dampness; catarrhal diarrhea of children, rheumatism in those living in damp dwellings; nymphomania and satyriasis (Dewees); small doses for pudendal itching and stitching pains; small doses for chronics with



Carlyle said: "The United Kingdom contains 27,000,000 people—mostly fools." A few are left over for Eddy.

Druggists testify that in severe diseases and emergencies treatment by all schools is the same.—*Critic and Guide*.

feeble circulation, cold hands and feet, full tissues and tendency to edema (Scudder); the specific indications being: Scaly skin affections, acute disorders due to cold and damp, deficient capillary circulation in the skin, diminished cutaneous action with urinous odor, cold and blue extremities, full tissues with tendency to edema.

Solanum Carolinense, the horsenettle, has been highly praised as a remedy for epilepsy. It depends on solanine mainly for therapeutic value. In large doses the horse nettle depresses the cerebrum and respiration, stimulates the spinal cord, but does not affect the circulation (Thornton). It is diuretic, anodyne and antispasmodic; of use in various convulsions and in tetanus (Napier). Pearce found it of special value in essential epilepsy, in most cases lessening the frequency and severity of the paroxysms; the dose being one or two drams four times a day of the fluid extract (Shoemaker).

Hare reported some success after a brief trial. Thrush found the plant best suited to cases of *grand mal* coming on after childhood and not hereditary; it was less useful in hysteroepilepsy and

very little in *petit mal*. It is not toxic, like the bromides, though Wilcox and Stevens state that even in moderate doses it causes marked hebetude.

Lloyd isolated from *Solanum Carolinense* an alkaloid differing notably from solanine, which he named solnine. Its properties do not seem to have been studied.

Lloyd says that horsenettle has been employed for tetanus, chorea, eclampsia, infantile and hysterical convulsions; its chief use being for epilepsy, especially the form where the paroxysms are worst about the menstrual periods.

Ellingwood recommends that in epilepsy the horsenettle be given until a sense of dulness or drowsiness is felt.

Dulcamara and horsenettle may safely be laid aside for the alkaloid solanine, on which their therapeutic values depend. Especially in epilepsy and cognate disorders should this agent receive a full trial, pushing, as Ellingwood suggests, until full physiologic effects are manifested. So many reports have been made as to the value of dulcamara, that we believe its alkaloid will prove a worthy addition to our list of remedies.

Chicago, Illinois.

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HEPATIC INSUFFICIENCY; AUTOINFECTION—CAUSES, SYMPTOMS, TREATMENT.

THE ACTIVE PRINCIPLE OF BILE AND THE ROLE IT PLAYS.

BY W. C. ABBOTT, M. D.

PART IV.—THE ROLE OF THE BILE IN PREVENTING INTESTINAL PUTREFACTION.

THE bile is a mixture of the secretions of the liver-cells and of the mucous-cells lining the biliary passages and the gall-bladder. The mucus contained in the bile differs in no way

from mucus secreted by any other mucous membrane and contains nothing that may be considered specific. The secretion of the liver-cells, on the other hand, contains several specific principles, i. e.,

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The greatest invention in the world is woman. Good thing when she was invented there was no patent office.—*Critic and Guide*.

Don't take yourself too seriously. The world would go on as well without you, or almost so.—*Critic and Guide*.

ingredients that are not found in the secretion furnished by any other organ of the body. In addition the liver-secretion contains a variety of substances that are found in many other body-fluids, and that appear in the bile as *excretory* and not as *secretory* bodies; among the latter I need only mention urea, lecithin, cholesterin, ethereal sulphates, and a variety of mineral substances, as the chlorides and phosphates of calcium, magnesium and iron.

Neither the mucus of the bile nor the excretory substances voided in the bile interest us in this place, for we are chiefly concerned in determining which is the specific secretion of the liver cells, the *active principle*, that can perform the many important functions that we have attributed to the liver, within the liver channels and, after it is voided, in the bowel.

The two most important of the specific elements of the bile are the *bile-acids* and the *bile-pigments*. The former appear in the form of the alkaline (potassium, sodium) salts of two bile-acids, viz., taurocholic and glycocholic, the latter in the form of a number of pigments that are all fundamentally related to a yellowish-green material called bilirubin and are known by the names of biliverdin, bilifuscin, biliprasin, bilihumin, etc.

Of these two groups of specific liver products the pigments must be considered to be excretory in character for they are physiologically inert, for they play no further role after they once enter the bowel; they are not reabsorbed into the blood or lymph from the bowel to exercise any effect in the tissues at large, but promptly leave the body in the stools after having undergone a va-

riety of chemical modifications in the intestine that change their character considerably before they are ultimately deposited in the feces. There is even some doubt in regard to the claim that the bile-pigments are formed exclusively in the liver, for there is much experimental evidence to show that bile-pigments can be formed anywhere in the body where blood-pigment undergoes stagnation—witness, *e. g.*, the yellowish-green discoloration of a bruise, of a hematoma, of sanguinolent exudates, etc. The pigments found in these foci cannot chemically be distinguished from the pigments found in the bile.

The bile-pigments, therefore, need not concern us further in our search for the active principle of bile (in the above sense). By exclusion, therefore, we are forced to assume that *the bile-acids are the only specific products of the liver-cells* that appear in the bile and that can exercise the important specific functions that this fluid can perform. This postulate is fully borne out by a mass of clinical and experimental data of which the following are the most important:

The bile-acids and their salts enter the uppermost portion of the small intestine in considerable quantities; an analysis of the stools shows that only a very small proportion reappears in the feces. Of about 4 Gm. of bile-acids, that a dog of 8 Kg. excretes in twenty-four hours, only about 0.5 Gm. appears in the feces (Bidder and Smith). The urine practically contains no bile-acids. Moreover bile-acids administered by the mouth reappear within a short time, not in the feces and not in the urine, but in the bile! (Neisser, Experiments on Human Subjects with a Biliary Fistula). The lymph of the thoracic duct (Tapheiner)



Christian Science: Babbling won't help you if arteries are cut, and hope ain't 'nuf for a cancer.—V. A. Robinson.

Without even knowing the location of the various organs of the body, the mystic heals incurable diseases.—Casson.

and the leucocytes of the circulating blood (Croftan) both contain bile-acids. From all these facts the conclusion is self-evident that the bile-acids are in great part reabsorbed from the bowel, perform an intermediary circulation from the bowel through the lymph-and-blood-stream to the liver, and ultimately reappear in the bile—to be again poured into the bowel and again to travel the same circuit. This fact alone should teach us that *the bile-acids are an important and valuable principle that the organism does not waste but uses over and over again*. One is forced to the conclusion that these bile-acids must be intended to perform a variety of functions in various portions of the organism, viz., in the bowel, in the circulating blood and in the liver.

As a matter of fact we know this to be the case. Within the narrow frame of this article I can only enumerate, in a diagrammatic way, what we know today of these multifarious functions; the finer experimental details and proofs of these discoveries cannot be given. Much of this work is recent and has not yet filtered from the widely-scattered monographs in different languages into our standard text-books of physiology and hence is not yet the common property of the older generation of practitioners who do not have access to the former publications. It is a pleasure and a privilege, therefore, for me to be able to present these latter-day discoveries in an assimilable form to the many readers of "the CLINIC family."

In the bowel, it has been known for a long time, that the bile-acids exercise chiefly four important functions, viz.:

1. They distinctly influence the peristalsis of the small intestine throughout

its course. They act consequently as laxatives, by causing the rapid propulsion onward of the bowel-contents and by promoting that liquefaction of the solid and semi-solid albuminous ingredients of the upper bowel that alone can be brought about if an intimate mixture of the albumins with the enteric ferments and with certain bacteria is promoted.

2. They regulate the degree of fermentative splitting of the albumins and the carbohydrates. When this degradation occurs too rapidly much pabulum is wasted because it cannot be absorbed as rapidly as it is formed; hence the bile-acids, by checking, *i. e.*, slowing this process when needed (and the outpouring of bile is reflexly regulated by the degree of disassimilation) promote better assimilation than if they were not present to inhibit enteric fermentation.

3. Their presence is absolutely necessary for the proper assimilation of the fats. Here they act physically by promoting the emulsification and saponification of fat-globules and by enabling the latter to adhere to the bowel wall and to enter the lacteal channels.

4. The bile-acids possess the power to a very marked degree of preventing the pullulation of many of the putrefactive bacteria that lead a parasitic existence in the bowel contents and that, if allowed to develop unchecked, cause abnormal putrefactive decomposition of albumin, with all the dire consequences that I have enumerated at length in previous paragraphs.

It will be seen, therefore, that the absence of bile-acids, a deficiency of this important liver-secretion, can produce serious perversions in the bowel in four different directions, viz.: (1) By depriving



Like an advancing tide, like a swelling ocean, Science has been slowly drowning superstition, mysticism, occultism.—Robinson.

Humboldt arose and flashed across the earth the Truth, that the universe is governed by law.—Victor A. Robinson, *Critic and Guide*.

ing the bowel-wall of an important stimulus to peristaltic movements they cause stagnation of bowel-contents and incomplete mixture of indigested material with digestive ferments; (2) by allowing the degradation of albumin and carbohydrates to proceed unchecked they cause too rapid disassimilation of these bodies with inadequate absorption; (3) by preventing the proper emulsification and saponification of the fats they prevent the assimilation of this important food and deprive the organism of this pabulum;

(4) by allowing intestinal putrefaction to go on unchecked they favor abnormal degradation of albumins, loss of nitrogenous material and *general autointoxication with resulting cardiovascular, nervous, hepatic and renal disorders.*

In the *blood* the bile-acids perform equally important functions, all of which will be elaborated, with more direct suggestions as to treatment, in my next (and probably concluding) paper.

Chicago, Illinois.

(To be continued.)



MODERN THERAPEUTIC SUGGESTIONS.*

BY GEO. F. BUTLER, M. D.

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PART I.

STORCK, the great Vienna therapist, was the first to advocate the principle of therapeutics which I am about to discuss. The earliest of Storck's experiments were made on pulsatilla and aconite. Both of these remedies were inherited from the ancients and employed by Dioscorides. When

*This is the first of a series of articles to be written by Dr. Butler under the general head of "Modern Therapeutic Suggestions." They promise a rich treat to every physician interested in this, the most vital department of medicine, and we know will interest and help every member of the CLINIC "family." Dr. Butler has had wide experience both in private practice and as superintendent of the Alma Sanitarium. He is a teacher in two well-known medical colleges and his Text-Book of *Materia Medica and Therapeutics* is in use in many of the leading medical schools. Last, but by no means least, he is the editor of *How To Live*, which is the magazine for the laity upon health and kindred topics. It stands opposed to quackery in all its forms and for the doctor and his influence in the home. By the way, you should have this magazine.—Ed.



Doctors have their faces turned toward science; faith healers toward superstition—an insuperable difference.—Casson.

medicine fell into the hands of the monks during the middle ages, the prohibition to them of blood letting led them to employ aconite in fever where the surgeon or lay medical man would have phlebotomized. To this in part, as well as to a superficial resemblance based partly on the doctrine of signatures, aconite owes its popular name of monkshood.

Storck employed aconite and pulsatilla in experiments on healthy men and women and on his own person. He used the expressed juice of the fresh plant in its active state and employed triturations with milk sugar on the same principle as Dover had used potash to triturate ipecac and opium in pulv. ipecac. comp. Sugar of milk was selected for two reasons, firstly, because it would readily comminute and tear asunder vegetable remedies when triturated with them,

The vindication of medical science is written in the practical elimination of cholera, smallpox, yellow fever.—V. A. Robinson.

and secondly because it was an indifferent substance which would not alter or impair the virtues of the remedies manipulated with it.

Storck drew conclusions from the physiologic effects of drugs shown in their untoward action as to remedial value. Having suffered for two years from violent contusion of the eye he took pulsatilla on the recommendation of Dioscorides, and soon noticed a severe lancinating pain in the affected part. This he construed as a favorable omen, an opinion confirmed by his own recovery and others under like circumstances. Storck claimed that two cases of partial amaurosis and ten of corneal opacities were either cured or much benefited by pulsatilla.*

Ophthalmic diagnosis, however, was not as clear before the day of the ophthalmoscope as it has since become. Indeed, Storck diagnosticated as gutta serena, hysteric amblyopia in a young girl afterwards cured by Mesmer with hypnotism. This case gave Mesmer the boom that produced the great Parisian éclat which he secured.

Despite such a pardonable error in diagnosis, Storck established many valuable therapeutic principles, some of which languished into temporary quackish obscurity because of their seizure and exaggeration by Hahnemann during the later charlatanish days of that great sectarian. Among principles so exaggerated was the one to which I have devoted this paper. This principle is known in Hahnemannian phraseology as "proving," one factor of it being the "aggravation," which Hahnemann quietly took from

Storck without unduly straining himself to acknowledge its source.

The wild absurdity of the "provings" it is hardly necessary to describe. The absurdity does not necessarily arise from bad faith, but is more frequently the result of both suggestion to those upon whom experiment is made and autosuggestion in the experimenter. Control experiments are ignored and the personal element of error in the "proving" is hence enormous. The principle tested by careful analysis of the elements underlying its action and by control experiments is none the less valuable. Many of the benefits charged to remedies administered on the principle of *similia similibus curantur*, advocated by Hippocrates, Paracelsus and Hahnemann, and crudely explained on that principle, are chargeable to the physiologic action of drugs on certain nervous symptoms as contrasted with their action on others.

In the action of every remedy as of every morbid influence, three factors have to be considered: First, the constitution of the individual; second, the state of the constitution of the individual at the time it is subjected to the remedy or morbid influence and finally the specific action of the remedy or morbid influence. This is true particularly of bacterial morbid factors. The state of the constitution generally and specifically at the time of bacterial invasion furnishes that *sine qua non* for bacterial action, the culture medium. Without this culture medium bacterial action fails, either as to germ action itself or as to action of its toxin. Indeed, lessened virulency depends entirely on the culture medium from which the germ has come or to which it passes.

The great errors that have been made

*J. C. Peters, *Journal of Nervous and Mental Disease*, 1878, p. 234.



A man is always happy until he finds out that he has digestive organs, or that he possesses a liver.

Oculum non cūrabis sine toto capite
Nec caput sine toto corpore,
Nec totus corpus sine animo.—Socrates.

in experimental therapeutics have been made by the transfer of experiments from an unanalyzed nervous system to one of different character. This has been particularly the case in what has been contemptuously designated "dog and pigeon" therapeutics. While the homeopaths have not illogically criticized these uncritical performances, still their much-belauded "provings" have had greater elements of error arising from factors already described. The question arises: Is there a means of applying this principle free alike from the errors imminent on "dog and pigeon" therapeutics and those implied in the "provings"? Careful study of drug action reveals such a means of great value properly analyzed in the untoward or by-effects of drugs.

Untoward effects while seemingly multifiform in character can, as *J. G. Kiernan points out, be readily arranged under a few general laws. The primary and secondary effects which are often opposite in nature; the organs chiefly affected by the ordinary action of the drug; the method of excretion of the drugs, all play a part in what may be called general constitutional untoward effects as contrasted with untoward effects due to temporary and evanescent conditions which however also arrange themselves in regulated fashion. Prediction may be made with considerable accuracy as to the untoward effects of any new drug on learning its therapeutic action and the factors cited.

As W. L. Baum forcibly states,** all matter which enters the economy, whether through the medium of the alimentary canal or through the skin, causes certain

changes to take place either in the nature of an excitant in the peripheral nerves (producing local disturbances and sometimes reflex nervous effects which influence the normal nutrition of the part), or it is carried by the circulation to organs for whose cells it has a chemic or physical affinity. Taking into consideration a temporary or permanent change in the individual cell it is readily seen how the ordinary physiologic action of a drug rapidly becomes perverted. The individual diathesis is an important factor in the causation of these effects. If, as Bouchard remarks, nerve reaction by corrupting for the moment nutrition, produces the morbid opportunity, it also modifies nutrition in a lasting manner and develops diathesis. Such acquired diathesis once established may become hereditary.

Into the action of all drugs, therapeutic or surgical procedures enter always, therefore the etiologic moment furnished by the congenital state of the constitution as well as its state at the time the drug is administered or the procedure employed.

Even a terse analysis of the physiologic effects of any given class of drugs demonstrates how varied are the organ and cell factors entering into the etiologic moment. Since the synthetic drugs have come into use the varied action of antipyretics has necessarily attracted attention. Yet all the therapeutic action was previously outlined in their untoward effects.

An antipyretic has as untoward effects, skin eruptions because it is excreted through the skin; because the skin through its pores regulates temperature and hence is under the influence of the nervous system controlling tempera-

*Medical Standard, Vol. IX.

**Medical Standard, Vol. XIV. Autointoxication.



Descartes placed the soul in the pineal gland, Bonnet the corpus callosum, Digby the septum lucidum, Haller in the pons.

Platner located the soul in the corpora quadrigemina. Boerhaave in the medulla oblongata. Pituitary body, Sajous?

ture, and finally, because the skin from an early period in embryogeny has had close connection with the nervous system. Since control of temperature cannot be effected without control of the vasomotor system regulating the blood supply, heart failure, collapse and palpitation may result together with certain eye and ear symptoms. If the drug be one which influences cerebral circulation especially by an influence such as results from what is known as a tonic action, then delirium, blindness and deafness of a temporary character are produced.

Temperature is regulated by three systems of nerves: Thermotaxic, or heat-regulating; thermoexcitatory, or heat-increasing, and thermoinhibitory, or heat-decreasing. The irregular balance of these centers constitute, as Ott* has shown, an irregular morbid state. If the thermoinhibitory centers be too much stimulated, they may lose their control, hence in certain individuals temperature rises after an antipyretic. Antipyretics which stimulate the thermoinhibitory centers must, to a certain extent, exert a calmative influence on nerve perturbation interfering with these centers. Antipyretics, neurotics and hypnotics so far as untoward effects are concerned, may be placed in the same class. More than fifteen years ago Laborde pointed out that all agents which reduce the normal animal temperature (the pulse being almost always simultaneously diminished) act at the same time on the sensory function of the nervous system and attenuate or abolish this function.

All thermic moderators hence are necessarily moderators of nervous sensory

action. The antithermic action is exerted primarily and preferably on the sensory centers of reception and perception in a manner to produce or annihilate, instantaneously, the functional activity of these centers; hence thermic depression must be followed by correlative depression of the phenomena of sensibility in the human system.

As all coal-tar antipyretics are sedatives and hypnotics, hence to a certain extent, their influence must be exerted through the vasomotor system. When undue strain is produced on the heart, this through its influence on the kidney circulation may produce renal symptoms even to the extent of albuminuria. If moreover the antipyretic be excreted through the kidneys, albuminuria is very likely to occur. Alteratives and cathartics produce hemorrhage from the mucous membranes and edema of those organs of special sense, beside skin eruptions.

Cathartics sometimes produce untoward effects which indicate an influence on the nervous system independent of their action on the bowel. Thus, as I have elsewhere pointed out,* castor oil produces such intense relief of nervous symptoms in children as to strongly suggest the influence of a nervine. This opinion is further borne out by the fact that among its untoward effects are well-marked-nervous symptoms like vertigo and tinnitus. Of course, the fact should be remembered that, as Havelock Ellis* points out, in early life the emotions caused by forced repression of the excretions are frequently massive and acute in the highest degree and the joy of relief is correspondingly great. But in

*Fever. *Bull. gen. de Therap.*, 1889.

*Therapeutics. *Psychology of Sex*, Vol. II.



The physician who refuses to battle with (for) Ormuzd is numbered among the servants of Ahriman.—Solis-Cohen.

I have always maintained that the very existence of pharmacy as a profession depends upon the physician.—W. J. Robinson.

adult life on most occasions these desires can be pushed into the background of consciousness, partly by training, partly by the fact that involuntary muscular activity is less imperative in adult life so that the ideal element in connection with ordinary excretions is almost a negligible quantity. The relief to which I refer is not of this psychic type since there is something more than the mere relief of excretions. The action is that of a sedative not a cerebral stimulant. That castor oil for example exerts a sedative influence on facial neuralgia is shown by the results reported by H. N. Moyer,* to the Chicago Academy of Medicine some years ago. His results have since been corroborated by H. T. Patrick and Blake Baldwin. The sedative action, in Kiernan's opinion, was due to the ricin which possessed a slight local anesthetic property. The revelation of the nervous influence of castor oil here proved suggestive of its application as a sedative in neuralgic states.

That tonics and alteratives have a similar action I have elsewhere shown. The most potent of tonics and alteratives are most fertile in untoward effects since a drug of potent physiologic action must of necessity try more severely inherited and acquired deficiencies of constitution than an inert drug. Too excessive strain on inhibitions weakened by acquired or inherited defect gives an undue sway to inhibited centers. Lewin* points out that most untoward effects of drugs may be conditioned on preëxisting affections of the inhibitory apparatus of the system. The influence of inhibition on physiologic states is often misinterpreted. Conditions are ascribed to weakness in dy-

namic action which are frequently due to weakness in inhibition of such a nature that the center responds unduly to a slight stimulus. Thus very frequently the conditions underlying sexual impotence and the many states thereon dependent are ascribed, and in part truly, to excessive desire and imperfect power of performance. But this excessive desire is often underlain by a weakened inhibitory state which permits response to a slight excitant that does not fully exhaust the sexual appetite. For this reason the employment of aphrodisiacs so often fails completely except through their psychic influence. It is through this last factor also that new aphrodisiacs at their first output succeed so brilliantly to fail so signally later. Experience has shown that the reverse treatment often gives satisfactory results. J. G. Kiernan many years ago pointed out that camphor and the bromides alike produced at times aphrodisia and emotional states thereto allied as untoward effects. Claiming that these resulted from a stimulus of the inhibitory centers (that required a considerable excitant to overcome, which excitant naturally produced very demonstrable effects) he prescribed camphor monobromate for cases of impotence where the quick, feeble response to stimuli was present. In many cases complete recovery occurred and the sexual system acquired its necessary tone. His results have been corroborated by W. L. Baum.

Some twenty years ago, E. C. Spitzka observed that in epilepsy the bromides produced aggravating effects. He suggested that this was due to suppression of the nervous explosion and indicated the use of an agent which should so distribute the accumulated nerve force as

*Untoward Effects of Drugs. *Journal of the American Medical Association*, April 14, 1900.



Hydragogin is a mixture of trs. digitalis and strophanthus, scillipicrin, scillitoxin and oxysaponin.—W. J. Robinson.

A Baltimore doctor charged with assault plead a mistake; for his "left meant the hospital, his right sure death."

to make the attack pass off without disturbing the balance of the nervous system. Ergot had been shown by Siemens some years previously to have among its untoward effects (when taken by healthy women) epileptic states. Starting with this basis Spitzka suggested the union of ergot and the bromides as a means of relieving the objectionable untoward effects of the bromides and utilizing the untoward effects of ergot in distributing the nerve discharge so as to prevent the undue disturbance of the balance of the nervous system.

The same factor was illustrated in the utilization of the untoward effects of ipecac as a basis for therapeutic action different from its ordinary emetic and expectorant action. Ipecac, as Woodward* many years ago demonstrated, had other actions equally valuable. It has been found by careful experimenta-

tion that ipecac exerts in small doses a sedative action and an alterative influence different from its emetic action. Under the inhibitory doctrine of Lewin this is perfectly comprehensible. The same is true of arsenic. Indeed, were the action of arsenic not known its various applications could readily be pointed out from the untoward effects observable from its use.

In dealing therefore with the untoward effects of drugs the therapist is brought face to face with suggestions of physiologic action which carefully analyzed give valuable therapeutic suggestions. There are of course many elements of error to be eliminated but this is the case with all problems in science. As a guide to investigation I refer to the tables of untoward effects from my work on therapeutics.

Chicago, Illinois.



TYPHOID FEVER—THE PROOF OF THE PUDDING.

BY W. H. BALDWIN, M. D.

THERE are yet many physicians who do not believe that typhoid fever can be aborted or any case shortened by treatment. They insist it must run its course, twenty-one or more days according to severity, and anything coming short of that is not typhoid and a mistake in diagnosis has been made. If you argue that the Widal test was proven, or the diazo reaction had taken place, they will insist that those tests are not conclusive evidence, as the reaction sometimes occurs in healthy individuals and again fails to respond when the disease is known to be present.

Now in this article I wish to show by conclusive circumstantial evidence that the disease can be lessened from the regular course and made much less severe by proper treatment, also the mortality greatly reduced.

I was informed by a colleague a short time ago that a member of the faculty of the University of Michigan said to him, that they did not use much treatment in typhoid at the University hospital, but gave their patients cold baths and a regulated diet. I also learned that their cases ran the usual prescribed course.

The second case of typhoid the writer



*Non-Emetic Uses of Ipecac.

All our appetites are conditional. Enjoyment depends on the scarcity.—G. F. Butler. Even quail palls after a few days.

Any worker near fifty should consider himself in his prime; good for another fifty of temperate, judicious work.—G. F. Butler.

was called upon to treat, soon after graduation ten years ago, was that of a young man nineteen years of age. In those days I followed my text-books more closely than I do now, and the case was treated in accordance with the order as laid down by Bartholow. The case ran the usual course in a satisfactory way with a temperature of about 101° F. in the morning to 102° F. or $102\frac{1}{2}^{\circ}$ F. in the afternoon. There was but little tenderness or tympanites in the bowels and at the end of the third week the temperature was within one-half degree of normal. I congratulated the family and myself on the apparently successful result, when on my next visit I found the temperature $104\frac{1}{2}^{\circ}$ F., my patient delirious, abdomen distended with gas. The symptoms appeared over the abdomen, an uncontrollable diarrhea developed and on the fifth day of the relapse my patient died. I learned that he had gone to the outhouse and had, contrary to my order, sat at the table and regaled himself on whatever his fancy suggested. There was no question about the diagnosis.

One week after in passing the house I was called to see a brother younger, I found a temperature of 102° F., headache, etc. I proceeded to clean him out with calomel, 1-6 grain every hour for twenty-four hours, then placed him upon the sulphocarbolates. His temperature was normal on the fourteenth day, and recovery was uneventful. At no time was the temperature above $102\frac{1}{2}^{\circ}$ F. The bowel symptoms were limited to tenderness, only with no diarrhea.

Three children of a neighbor of the above, who drank from their well, were taken with fever. The first, a girl seven years of age, was sick a week before

medical assistance was called. I found her inclined to delirium, temperature 104° F. The fever ran twenty days; she was very sick, had sordes on the teeth and lips, and hair all came out after recovery. The other two, one a boy older and one younger, recovered from the fever about the fourteenth day. They were treated from the start.

A young lady twenty years of age, was sick a week before aid was called. Having been ailing with some trouble of digestion for several months it was thought by the family that her present sickness was due to that condition, so the case was well advanced. On account of an irritable stomach the sulphocarbolates could not be given; at that time I used the ordinary commercial article and she could retain neither the zinc nor sodium salt.

The treatment was mainly dietetic and hygienic, consisting of predigested foods, trophonine, etc., with bismuth subnitrate. The case was progressing well under this regimen and had passed the third week, when an alarming hemorrhage of the bowels occurred, followed by another the next day. The patient was very low for three days when improvement began and recovery ensued. A sister two years younger, taken during the second week of her sister's illness, was treated with the sulphocarbolates and calomel. Her temperature was normal the tenth day.

A young man nineteen years of age under the care of a colleague, came under the care of the writer on the eighth day of the disease. He was wholly irrational and had been so for three days. The bowels were bloated and a characteristic rash thereon; sordes on teeth and lips, tongue deep red and dry, tempera-



Let grandma wear gaudy colors and grandpa be dudish; both will be younger for it; and it is in harmony with nature.—Butler.

Gray hair is honorable; that which is dyed is an abomination before the Lord.—George F. Butler. How about the peroxide kind?

ture 103° F. under the arm. I gave 1-5 grain of calomel every hour for twenty-four hours and 5 grains of zinc sulphocarbolate every three hours. At the end of the twenty-four hours, during which time the bowels had moved several times, I found him rational and he continued so throughout the remainder of his sickness. At the end of three days his tongue was moist and clean and the sordes had entirely disappeared from the teeth and lips. A comparatively comfortable sickness continued, with temperature not above 102° F., which disappeared during the third week of illness.

I received telephone message from the country to visit a boy who was very sick, and who the family feared would die. The case had been under care of a colleague about a week. I found a boy ten or twelve years of age, delirious and could not be aroused; lips, teeth and tongue were covered with sordes; tongue dry, cracked, and looked like a rotten piece of beefsteak; temperature $103\frac{1}{2}^{\circ}$ F. under the arm; bowels distended and covered to the chin with a typical rash. I believe he presented the most thoroughly infected appearance of any case I ever saw. The house was filled with neighbors and much excitement prevailed.

I have now become so confident in the result of treatment that I assured the family that I expected the boy to become rational during the next twenty-four hours. I began the administration of calomel, 1-10 grain every hour and the combined sulphocarbulates, one tablet every two hours. He was rational next day, his teeth, tongue and lips were clear by the fourth day, and his tem-

perature normal on the twenty-third day of his illness.

A sister younger was found with a temperature of 102° F. on my third visit; under calomel and sulphocarbulates her temperature was normal on the thirteenth day. At no time did she exhibit any distention or diarrhea, but the bowels were tender under pressure and temperature arose to $103\frac{1}{2}^{\circ}$ F. under the tongue, and epistaxis occurred. There was no eruption.

Now I have not entered into a scientific discussion of this subject for I am aware that when one begins to talk *bacillus typhosus*, diazo or Widal, some of our brethren are inclined to say, Rats! So I have presented as briefly as possible a few cases in which the diagnosis could not be questioned by reason of old-fashioned evidence, and to show that the disease was cut short and benefited by treatment. More could be presented but it would be but a repetition. While I have seen cases aborted, which I was satisfied in my own mind were true typhoid, I cannot furnish proof after the above style, so omit them; but if cases of typhoid can be modified and the course shortened one-half, cases changed from malignant ones to simple in two or three days' time when the disease is at its height, why not abort a certain proportion under favorable circumstances?

The writer begins by giving broken doses of calomel, 1-5 to 1-10 grain every hour for the first twenty-four hours, and after that a few doses every day or nearly so throughout the disease. If the case is just beginning he gives nothing else. If advanced, begin the administration of the combined sulphocarbulates at once giving ten grains every two or three hours. Follow with cold water. I now use

Cultivate thankfulness and cheerfulness. An ounce of good cheer is worth a ton of melancholy.—Geo. F. Butler.

The gastric ulcer case has appetite but fears to eat; the cancer patient has little desire for food.—Gerhardt.

the intestinal antiseptic tablet entirely (sulphocarbolates of lime, zinc and sodium) and have no trouble with irritable stomach since using it and so am able to give larger doses when required. I give no antipyretic unless temperature goes above 103° F., in which event I use the defervescent compound in dosage as directed. Limit the diet to as near nothing as possible and confine it to milk, broth from which the oil has been

removed, prepared foods and home-made ice-cream. The latter is extremely well borne and liked and can be made rich with cream and raw eggs. Cold sponge baths when temperature is high. Since using the above outlined treatment my percentage of recoveries is 98 per cent for ten years and barring perforation and hemorrhage I confidently expect recovery in every case.

Quincy, Michigan.



POINTS IN MINOR SURGERY.

THE TREATMENT OF CARBUNCLES, ABSCESES AND BURNS.

BY GEO. H. CANDLER, M. D.

THE carbuncle, abscess, boil or "felon" is constantly demanding our attention, and these together with burns and cuts or abrasions make up the bulk of the list of disorders calling for minor surgical work. How abominable were the tortures the doctor of old, inflicted upon his felon victim! The writer has seen—and that within a year—a man take hold of a thumb in the worst stage of onychia and slit it up to the periosteum without a word. Then he took a curette and scraped and gouged while the patient howled and swore. True, the doctor was a large man; the patient "colored," and the work effective; but at the same time that is not the way to treat such cases. There is no doubt but that negro will seek another physician next time he has a "sore spot."

In boils and carbuncles (and some abscesses) it is possible to abort the process by applying ichthyol (pure) for twenty-four hours, at the same time giving internally a purge of blue mass or calomel followed by a saline and then saturating

the patient with calcium sulphide. Grain 1-3, hourly, will do the work in a day. Carbuncle which has advanced somewhat may be treated thus with effect: Paint the area with collodion (several layers) leaving a small spot in the center uncovered. Inject into this with a hypodermic syringe a few minims of this solution: Carbolic acid (crystals), gr. 20; glycerin and water, of each dr. 2. Go well down and turn the needle in every direction, leaving a drop of solution in each place. Repeat daily for three days. That is usually the end of that carbuncle. Under ethyl chloride anesthesia, a small crucial incision may be made in the center if thought best and then the fluid injected. Dress with an ichthyol ointment. This is the method for advanced carbuncles also. Spray with ethyl chloride, incise center and inject solution; after twenty-four hours the mass can be cleaned out easily. Use ichthyol, always, as the dressing, one dram to lanolin one ounce.

If the patient won't have the knife used, try this ointment—it often works perfectly: Ac. carbolic, gr. 10; fl. ext.



There is hardly a question connected with ulcer of the stomach that is not in dispute.—W. J. Mayo, *Southern Med. & Surg.*

The stomach tube is contraindicated in menstruation, when unnecessary, and when it may endanger life or aggravate disease.—Boas.

ergot, dr. 2; pulv. amyli and zinc oxide, of each dr. 2; ungt. aq. rosae, oz. 2. Spread on lint thickly and apply. Internally push the treatment recommended and the pus will liquefy and find ready exit.

In carbuncles which demand the knife thorough work is called for. It is better then to give enough ether or chloroform to render the patient unconscious of his troubles, though the writer has by the use of chloride of ethyl and a weak cocaine solution performed such work without much suffering on the patient's part. Make the crucial incisions small but go deep; then throw the carbolic acid well down to the base, ejecting a few drops as the needle is withdrawn. Mop out the incisions with the acid and dress. Some prefer compresses wrung out of a bichloride solution and ice above.

In excising a carbuncle, spray the skin with ethyl chloride in a circle around the affected area; inject (by Schleich's method) a cocaine solution just under the skin; make the wheals overlap and then incise. Inject again and go deeper; control hemorrhage with forceps and keep in sound tissue. A large hole will be left which must be swabbed with chloride of zinc solution (gr. 40 to oz. 1) washed off and painted with carbolic acid, alcohol and methyl violet, each one part, and then packed with iodoform gauze. This is no simple operation and is seldom needed if we get the case under the treatment outlined early.

"Felons" may be aborted often by painting the part with a strong solution of silver nitrate in nitric acid; or the fuming acid, may be painted on. Plain ichthyol will also be effective. Don't use heat unless you want to hasten sup-

puration and remember that if any pus has formed it is deep and must come out, so the sooner the better. Freeze a spot with ethyl chloride, inject cocaine solution (after placing ligature at base of thumb or finger) and incise to the bone; don't cut through the nail; it is never needed if incision is made early. Now apply antiseptic (warm or hot) dressings and there will be no more pain. Give triple arsenates, nuclein and echinacea internally.

Boils can be opened when ripe, by penciling with pure carbolic acid and then incising; a small incision is enough. Give calcium sulphide, stillingin, echinacea and the arsenates internally. Keep bowels empty and aseptic.

Abscesses require differing methods of treatment according to cause and location. The surface, if accessible, must be cleansed with soap and sprayed with a two per cent solution of carbolic acid for ten minutes every two hours; or hydrogen peroxide may be used. The internal treatment formerly advised should be pushed. Between sprayings keep compresses saturated with bichloride solution over the area. An ethereal solution of menthol painted on will afford relief from the pain in more advanced stages. Sometimes the following method works beautifully: Wash clean, dry and apply with a swab a solution of silver nitrate, gr. 80 to dr. 4 of distilled water; go over on to the sound skin. In twelve hours repeat the process if inflammation remains.

Once pus has formed, incise, using the methods described before. Be sure of asepsis. Incise the part most dependent and look out for pockets. If present, break down with curette. Open



Lavage is useful in esophageal dilation; to dilate stricture and instil oil; to remove poisons or mucus.—Amster, *S. Med. & Surg.*

Lavage for inoperable pyloric stricture; in gastric neuroses for psychic effect; gastro-succorrhea; pregnancy.—Amster, *S. M. & S.*

deep abscesses with director always (Hilton's method) and provide for drainage. Always irrigate and place a piece of gauze in the cavity with an end under the dressings for the first twenty-four hours.

I insert the nozzle of a powder blower and throw into the cavity half a dram of euprophen or iodicol. This certainly facilitates healing. In those abscesses which are so situated as to render incision inadvisable, aspirate, being sure of sterile surface and needle; use needle

of large bore and be sure that you empty the cavity; to do this inject a saturated solution of boric acid or a five per cent solution of carbolic acid. Take heed of quantity injected and see that same amount is withdrawn. Seal the opening with collodion.

The main thing is to know what to do and to do it with the least possible distress to the patient. The doctor who operates painlessly, operates often. Burns will be considered in the next article.

Chicago, Illinois.



ABORTIVE TREATMENT OF PNEUMONIA.

BY J. BYRON SLOANE, M. D.

WHILE I am not now engaged in the practice of medicine, still, I am interested in its progress and watch with interest all new treatments brought out, and try to follow them to their destiny; success or failure.

Up until a little over a year ago I practised medicine, from the year of my graduation. During my senior year I read an article in a copy of the *Times and Register*, a magazine published in Philadelphia, on the "Abortive Treatment of Pneumonia." It gave as its principal remedy this prescription:

R Caffeine citrategr. 1-2

Phenacetingr. 1 1-2

Quin. sulphgr. 2

Sig. For one capsule. Make twelve doses like the above.

M. One capsule every three hours.

This prescription I used in different modified degrees successfully, not only in pneumonia, but in different forms of lung and chest trouble, also with success in colds.

In cases of pneumonia I always used other remedies in conjunction with this preparation, treating the symptoms as they would arise.

During these years of practice I do not remember of losing a single case where this disease was the primary trouble, and don't think I had more than two or three cases, at the most, reach the crisis. I consider the success I had in the treatment of these cases due as much, or more, to other drugs than to the above prescription, or perhaps it was due to the combined effort, or result of the different drugs in combination, for I always gave veratrum viride with the capsules, adding aconite, when indicated, and stimulating or aiding the heart with strychnia when necessary, and my experience with this treatment has convinced me that not a single case of pneumonia need be lost if this treatment is followed and pushed to the limit in severe cases, and that not a single case will reach the crisis if the case is taken at the start, or treatment is commenced in-



Gavage for refusal to eat; esophageal disease; after intubation for diphtheria and other larynx stenoses.—Amster, *So. Med & Surg.*

Read up fully on cases on hand. None can be considered alone; it is always in relation to variant cases.—Patrick—not St.

side of twenty-four to forty-eight hours from the start, or even later.

My method of treating all these cases, unless there was strong evidence that some other should be followed, and this only happened in a very few cases, was as follows: Modifying the dose of each drug to suit the case, but watching the case very carefully for the first two to four days, and calling in a nurse in each case, unless there was some member of the family that I considered competent to act as such, so that the patient would have constant care, and the medicine given regularly.

My first act would be to administer a large dose of Epsom salt, or Hunyadi water, or some of the other salts, or saline mixtures that would serve the purpose as well, and would follow this in two to four hours with a good vegetable cathartic pill, this in turn in three to four hours with a saline cathartic.

In each case, I would apply over the chest, sides, and back a large mustard plaster made in proportion as follows: One teaspoonful of mustard to a large tablespoonful of vaseline, using enough of each to make a sufficiently large plaster to thoroughly cover the chest. Plasters made in this way will not blister, and are just as effectual, besides getting the medicinal effect of the vaseline—always laying a thin cloth on the side that comes in contact with the skin, and leaving it on long enough to get results.

Commencing one-half hour after the first dose of saline cathartic these tinctures, *veratrum viride* and *aconite*, were given alternately or as directed. These I would take from my case as I always carried them with me, and used the homeopathic tinctures, as I found them more reliable, and more mixable with

water, and would give from one to five drops of *veratrum viride* every fifteen to thirty minutes until I would get results on the pulse, which would be indicated by a decided slowing, and a softening condition; then I would either lessen the dose or lengthen the time, but would hold the pulse down with this to as nearly normal as possible.

If the temperature was very high at the start I would give *aconite*, from one-twentieth to one-half drop every thirty minutes to one hour, according to the case and circumstances, and would commence giving the capsules as soon as they could be put up by the druggist, but modifying the dose of each drug in these to suit the case, and changed from the citrate of caffeine to the alkaloid, and always specified Merck's; in that way I knew the strength and action of my drug, and what results to expect.

With very young or very old people I would always commence with a small dose of strychnine to aid the action of the heart. The disease would be checked at once—whether this was due to the action of any of the drugs used, or to the combination of all, I could not say for certain; but the result was that the disease was checked at once, by opening up the air-cells, relieving any congestion or engorgement, reducing any and all febrile action or symptoms, and the patient would usually be relieved of all distress in a short time, in from twelve to twenty-four hours, would be greatly improved, and in a few days all danger from the disease would be over. The patient was convalescent or up before the disease is supposed to reach the crisis, and in cases where there was no complication it was necessary to have the patient in bed only a few days, not more



Systematically get up one subject well; investigate it thoroughly in every way; then take up another.—Patrick.

Don't admit to your presence a journal that is not perfectly straight and clean; don't indulge in yellow journals.—Patrick.

than a week at the most. Little if any attention need be paid to the diet, as the patient is well and ready for any diet before there is any great strain on the system.

The capsules are apt to produce considerable sweating, and care must be taken to prevent drafts striking the patient, and to prevent them from taking cold, although the room and house should be properly and thoroughly aired.

I could cite any number of cases, but will only give a few:

Mrs. D., aged 24, was down town doing her Christmas shopping; she was suddenly taken with severe pains in the chest and with a hard chill; she was taken home in a carriage and immediately put to bed. I commenced treatment as above described, called in a nurse, but discharged her in forty-eight hours. The patient was up the following day. Upper lobe of the left lung affected.

Miss K. had been ailing for a day or two with what she thought was "grip"; taken suddenly ill with severe chill, terrible headache, and pains in the chest. She was put to bed and I found a well-marked case of pneumonia. The lower lobe was affected; rales were very distinct over a large area. I followed the above treatment and she was well in three days, as far as the pneumonia process is concerned. An abscess developed in the middle ear and the nurse was kept a week or so for this.

Mr. E., aged 42, member of the theatrical profession, came to Detroit one week before his opening, to rest; he was suddenly taken with severe chest pains and chills at dinner-table. His wife got him to his room and in bed about 7:30. I did not see him until about 9:30. He was a man about five

feet four inches in height and weighed over three hundred pounds; his head seemed to be set on his shoulders, no neck. The face was very much flushed, temples throbbing, and he was very much alarmed at his own condition, for as I learned afterwards he had always been very much afraid of pneumonia. I thought at first that I had finally met one case where my treatment would fail, but decided I would give it a trial, and knew it would be a severe one. I started off with the treatment as usual, only in each case I either doubled the dose or shortened the time one-half, and did not wait for the usual time before commencing each medicine. I could not return to see him until after twelve o'clock; when I did, I was greatly surprised at the change, and at first thought my treatment had been a little too severe; if it was, it was, perhaps, the means of saving his life. His pulse beat was below normal, his temperature was down from $103\frac{1}{2}^{\circ}$ to 99° F., and instead of his face being flushed and bloated it was decidedly pale; was very sick at his stomach, and was in a profuse cold sweat. A hypodermic injection of 1-60 grain of strychnine and 1-8 grain of morphine soon relieved him from all bad symptoms. This was Thursday night. On Saturday night he called at my office, and on Monday afternoon he went on the stage and did his act. The left lung was affected, but owing to his condition it seemed as though the whole lung was involved.

This was perhaps the most severe test I had given my treatment, but it proved none the less effectual for all.

If this treatment is thoroughly carried out, and the case is well watched



Read to write; provided, of course, that the writer compels himself to produce really good stuff.—Patrick.

Naoumov removes warts by concentrating on them the sun's rays; the nutritive vessels become occluded and atrophy results.

from the start I do not believe that a single case will reach the crisis, or last over a few days at the most, and the mortality from this will be zero.

Detroit, Michigan.

—:o:—

Dr. Sloane did well, and got good results from good treatment. He found it advisable to change from caffeine citrate to the alkaloid caffeine. Why? Because citrated caffeine is not a chemical compound but a mechanical mixture, variable in the proportions of its constituents. He got good results from the

first; better because more uniform from the second. Now let him apply this experience to his veratrum and aconite. No one denies that good results from both these; but both are variable in composition and effects, and may with much advantage be replaced by the uniformly-acting alkaloids, veratrine and aconitine. It may seem a little thing, and wholly incompetent to produce such decided betterments of results as are claimed by the advocates of the active principles—but, try it for yourself. That beats argument.—ED.



ALKALOIDAL THERAPY IN DISEASES OF THE STOMACH.*

BY DR. E. MARTY.

IT should not astonish anyone to hear that half the diseases that the physician has to treat come from the neglect of attention to the proper functions of the digestive organs. Numerous agents begin to undermine our health when once the decadence of digestion is allowed to take place, and many are the ill consequences that follow in its wake.

No wonder that after a long indulgence of excesses at table, irregularity as to meal-time, hasty gulping of fearful amounts of ill-assorted and heterogeneous and at times even damaged foods, with habitual neglect of proper elimination by the stools—no wonder then that various dyspepsias come as a result. And in their train come also those interminable kinds of gastrites, colites, appendicitis, and the evils connected with them, hepatic and renal lithiasis, infectious fevers, neurasthenia, gout, rheumatism, arteriosclerosis, etc.

For a long time the pathology of the stomach was wholly unknown, and even

now, in spite of progress made in this branch of medicine, how much empiricism still reigns in the care given to gastric patients! And yet we have at hand various procedures which allow us to make a far better clinical investigation, and which clinicians are making use of to study out, from various sides, the troubles of secretion, motility, absorption; it is no longer at haphazard that we have to prescribe acids, alkalies and digestive ferments, but in a true rational way.

What has the dosimetric (alkalometric) method contributed to a better treatment of gastric troubles? What good can it do in the various affections we are called upon to cure?

We can show this best by clinical examples, well studied and treated with precision:

ATONIC DYSPEPSIA—NERVOUS.

For some years I have had under my care a young man who is now a pupil

*Translated from *La Dosimetrie*, by Dr. Epstein.



The proportion of drug fiends among Chicago prisoners has more than trebled since 1903; 309 to 970 cases.

The naval pharmacists are pushing to obtain increased rank and pay from Congress, with ulterior access to commissions.

in a large educational establishment at Toulouse, and whom I was called to see not long since in consultation. His hereditary antecedents were as follows: His paternal grandmother is living and is hale and hearty in her old age. His father is of a nervous nature, but has enjoyed good health all his life to the present time. His mother, whom I have known and attended, is a nervous woman, neurasthenic, dyspeptic, full of ailments which are associated with all kinds of genital nervous incidents closely neighboring upon a general neurasthenic state. The young man himself never has had any severe sickness. His growth was fatiguing, his figure slim and long and his thoracic perimeter has not the measure appropriate to his height. He was preparing for his examination at St. Cyr, when he was taken with great general weakness, headaches, pains in the shoulders. His stomach showed at the same time considerable functional insufficiency. Lack of appetite was almost absolute, and constipation constant. Eating caused almost immediately a heaviness, soon followed by epigastric tension, and painful uneasiness in the gastric region. Sleep at night was good but not refreshing, and the young patient in the morning felt tired and lazy.

Examining him I found the gastric parieties somewhat sensitive, flaccid and soft on palpation. Percussion showed a somewhat greater capacity than normal. Some succussion betrayed great muscular weakness. I had no doubt of having a case of painless atonic dyspepsia of the neurasthenic kind and I formulated the following treatment:

To prepare the ground I ordered him to take in the morning on an empty stomach three granules of glycerophosphate

of iron, three grains of glycerophosphate of lime. Before the two principal meals he was to take two granules of strychnine hypophosphite, and two granules of quassin. Lastly at night, before going to bed, one granule of hyoscyamine and three granules of podophyllin.

This treatment did wonders. The appetite was soon aroused, gastric ballooning disappeared, the intestinal functions became regular, aptitude for work increased gradually, and without causing the least fatigue, and in spite of the anxiety of choosing a career for his life, which rendered him somewhat nervously depressed, his general condition remained excellent. I had the young man promise me to be faithful in carrying out the treatment, in taking the dominant strychnine, strychnine hypophosphite, whenever he had to do some additional work, or whenever a feeling of fatigue occurred during the ordinary exercise of his profession.

After three years' severe struggle to find an opening for making a living my patient told me how happy he was to be free from all those difficulties, thanks to the precautions taken against the weak point in his constitution. The strychnine hypophosphite gave him promptly the strength he needed.

As his intestine acted yet irregularly at times, I advised him to stir up that organ with some five-granule doses of jalapin, three or four times before meals. This, I think, would suffice to help up that paresis.

HYPERCHLORHYDRIA.

M. B., 41 years of age. Came to see me about six months ago about a gastric affection. He consulted some other physicians about this, but without much re-



The *Western Druggist* looks on the proposal to tax wood alcohol as a trust measure to lessen grain alcohol competition.

Efforts are evidently being made to arouse a popular prejudice against wood alcohol, as was done with alum baking powder.

lief. His hereditary antecedents are as follows: His father died from a cold at seventy-two years of age. His mother, now seventy-four years old, is in good health in spite of an attack of paralysis, and is only subject to a habitual constipation of many years' standing. He was always well during infancy and adolescence. During his military service he drank very little alcohol and indulged in no gross drinking excesses. He spends about three cents a day in tobacco, used in the form of cigarettes since he was sixteen years old.

His trouble dates back to 1892, when he had the influenza. He was confined to his bed for two months and was one month in convalescence. It left him with gastric suffering, first with intervals of ease and then aggravations. His suffering increased in the hot season and in the beginning of cold weather, and his daily condition was as he describes:

He tires at six o'clock and suffers from pain in the kidneys (back?), without general fatigue. His breakfast consisted of milk which he very badly digested, having some pains, heaviness all the morning, without acidity or regurgitation. Before dinner he felt hungry. After this meal, which consisted of legumes (vegetables generally) and eggs, he rested quietly for two or three hours, then the abdomen swelled, and he had acidity of the stomach, and burning in the throat and under the breast bone. This trouble lasted until six in the evening and passed off after taking a cup of bouillon. The evening meal at half-past seven was little different from that of the morning, and occasioned at first no trouble, except some abdominal pain. He went to bed at nine, was awake a long time,

and despite a feeling of oppression fell asleep at last.

He wakes at three in the morning with acidity of the stomach, salivation of clear water and burning, glairy stuff in the throat. When the exacerbations amount to a real crisis this poor man has to abstain from everything, and yet despite the salivation, the acidity, the pyrosis or regurgitation there is very little vomiting, and the effort brings up only a little alimentary debris.

The man's intestinal functions are defective, and constipation is his ordinary condition. On examination I found the sonority of the stomach normal, and it occupied its ordinary space. The entire epigastric region is painful, but no puffiness, no bulging, which is a special sign of gastric contraction. Yet the movements of the stomach are followed by painful spasms.

The diagnosis of atonic painful dyspepsia with hyperchlorhydria forced itself upon the mind so that I instituted the following course of treatment:

Take every morning a teaspoonful of calcined magnesia in milk on an empty stomach, and at the same time:

1. Five granules of cocaine hydrochlorate; three granules of morphine hydrochlorate, and one granule of hyoscyamine.

2. Take every two hours a cachet containing: Bicarbonate of sodium, Gm. 0.50 (gr. 7 1-2); creta preparata, Gm. 0.50 (gr. 7 1-2); with this, three granules of cocaine and two granules of morphine.

3. Absolute milk diet. No tobacco.

From the first day of this treatment the relief was evident. The patient could sleep all the next night without awaking. The stools became satisfac-

A Russian visitor says American pharmacies sell many drinks, and "suspicious medicines at fabulously high prices."

If we must die, let old age claim each of us as its natural trophy.

—G. F. Butler.

tory by the magnesia and milk. At the end of the eighth day alimentation was resumed with milk as a drink. The above alkaline cachet was given with the repast together with two granules of strychnine arsenate as a general tonic. Two hours after that, to prevent any return of the trouble, I prescribed another cachet with the alkali together with a dose of cocaine-morphine. The local and general conditions became so much improved that the patient presented an excellent appearance and plumpness, denoting a sure and lasting return of health. The total abstinence from tobacco and the hygiene prescribed assured the recovery to health which lasts till today.

These two cases show with what rapidity and certainty dosimetry (alkalometry) acts in gastric diseases. Other cases will follow later and will show our readers various kinds of gastric affections treated with equally rapid and successful results.

But what is more remarkable is to see how we can avoid and prevent gastric affections with alkaloidal therapy to which a suitable hygiene is conjoined.

It is evident that intemperance in eating and drinking, that the abuse and sometimes even the slight use of tobacco and alcohol must be forbidden. But outside of these courses it is wonderful to observe with what convenient and precise way the alkaloids can be used in regulating any functions of the stomach which have become irregular in any of its parts.

The care of the mouth ought to be an object of continual attention by all of us. And the care of the pharynx, although apparently of secondary is yet of real importance. Have we not the calcium

sulphide for careful disinfection of the throat and to prevent tonsillar hypertrophy and rhino-pharyngitis, which is so dangerous for the digestion, though the deglutition of their abundant mucous secretions? This medicament is worth more than all the mufflers and wraps around the neck as means of preventing colds.

Strychnine stands the first in rank as a nervosthenic, general and local. Under its general influence the nervous system of the stomach renders its muscular fibers more resistant, more tonic. The rolling movement of the stomach contents becomes more complete and its emptying into the duodenum more rapid. Locally it acts upon the muscular fibers, but still more considerable is its action upon the glandular secretions, which forms a better chyme, better prepared for intestinal digestion.

Quassin, cubebin, and piperin assist the action of strychnine in increasing the glandular juices, and thanks to the reflex action, the appetite, too, the desire to feed one's self is also increased.

If the glandular juices happen to be insufficient for the digestion of albuminoids, then we have the granules of papain and pepsin to add to the former, forming the compound digestive granule which renders so much service by its composition.

Pain can be treated by all the scale of the alkaloids beginning with cocaine, then morphine, atropine, Gregory's salt, narceine, hyoscyamine and codeine.

Lastly we must not forget that medicament which secures the intestinal evacuations, which is so important in gastric diseases, viz., the well-known seidlitz (saline laxative). It is an alkaline laxative, mild or more energetic at



Better be born lucky than rich? In fact it is better to be born tough than either lucky or rich.—G. F. Butler.

After 40 eat less and eliminate more. Drink more pure water and keep the peristaltic wave of prosperity moving down the bowel.—Butler.

will, and the only one which judiciously used may make the other medicaments unnecessary. But when the intestinal atony has acquired a high degree, this medicament is inefficient alone without the aid of alkaloidotherapy.

Jalapin stands the first in the rank for efficiency. At a dose of some milligram granules it acts on the stomach, facilitating its peristaltic movements and the evacuation of its contents into the intestine. But as an intestinal evacuant it is in a five-centigram dose (gr. 5-6) that its action is appreciable. I have never exceeded ten centigrams, and the medicament served me well in the tender age of nurslings as well as in the paretic atony of old age. Next to this are podophyllin and euonymin, which act on the biliary secretion; bryonin, colocynthin, chlorin, and cyclomin, which can be used in small doses only, but the dosimetric study of them has not put

them yet to all the diverse uses in which they could serve.

I have said enough to show how dosimetry (alkalometry) can be used in gastric affections. It is abundantly able to stand the test.

Toulouse, France.

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There is a fine field for the use of the alkaloids and active principles in diseases of the digestive tract, and we hope to do something to develop it on this side of the Atlantic. Therefore, this article is peculiarly welcome. We do, however, take exception to the use of cocaine and morphine in the painful neuroses of the stomach. It is in just such cases as these that habits are so easily formed. Furthermore, in ninety cases in a hundred the pain is easily relieved by simpler measures, such as appropriate diet, rest, the use of alkalies, etc. Let's be careful, always.—Ed.



SURGERY IN MINING AND LUMBER CAMPS.

BY C. E. GREASON.

I NOTE with great pleasure the article begun in the September and continued in the October number of the CLINIC, on "Minor Surgery," written by Dr. Candler. We need articles on the minor points both in medicine and surgery, since it is often the little things which give the most marked results.

I am in a lumber and mining camp and see only dirty, ragged wounds, which must be treated generally in a bunk-house or cook-house where aseptic surgery is an impossibility and where the assistants are millmen or miners. I am not much of a writer and am not ac-

customed to going to press with any of my little experiences, but I must take exception to a few points. The writer states that corrosive sublimate and carbolic acid are undesirable in many cases. Also that iodoform is the same. This may be true but it is not borne out by my experience. I use them both almost daily and have never found any bad effects.

The creolin odor, as well as that of iodoform, is undesirable but I have never had but one case of bad effects from iodoform. That was in a shingle sawyer, who had used it frequently before without bad effect. This time he developed



Don't be foolish. Eat less and play more. Indulge in less fret and fume, and more fruit and fun.—G. F. Butler.

There are people too indolent to be healthy; literally too lazy to live.—Butler. At least too lazy to be long-lived.

an erythema about the cut which was followed in four hours by the formation of vesicles. The arm swelled, but there was no pain and healing was uninterrupted. Iodoform was stopped and all symptoms disappeared. I have a case once in a while that forms pus and will not heal by first intention. So have we all.

I use a 1 to 1000 bichloride solution to wash the wound, stop all bleeding, suture where necessary, dust with iodoform, apply gauze wrung out of the solution used as a wash, cover with cotton and bandage. If there is likely to be any hemorrhage I see the patient the following day and redress the wound in the same manner. In the course of a few days, I use bismuth-formic-iodide in place of the iodoform and dust the wound dry, as a wet dressing causes pain. Remove the stitches in four or five days and discharge the patient. This to me does not corroborate the bad effects of the bichloride.

I often treat wounds with nothing but a solution of carbolic acid, 20 to 30 drops to the pint of water. I clean the wound, stop the hemorrhage, suture when necessary, apply gauze wrung out of cotton and bandage. This treatment may look a little crude to the city doctor who is accustomed to nurses and plenty of assistance in the hospital, and it certainly will not, as stated before, heal all wounds by first intention. Nor will any one course do it, so far as I can learn, let surroundings be what they will, but from this treatment I get good results and that is all any of us want or care for.

A man from the city, or the country either, who can call to his assistance in an hour's time a fellow practitioner, cannot appreciate the situation in a practice

like this. I have no one, not even a nurse, within thirty-five miles, and often I can get no help in less than twenty-four hours. When you go to your case, let it be medical, surgical or obstetrical, you need quite often a goodly supply of nerve tucked in somewhere about your anatomy. I think if a few of the city brethren would "take a course" in a place of this kind it would be of great value to them. Many of those who lecture to the boys in college would do infinitely better work. The lecture would be less "booky" and more interesting.

I know from my own experience, with all due respect and reverence for my teachers (and I had some good ones), that the graduate could go to work with more determination and confidence if he had more training in this field, since it is the emergency case when no professor or any assistance is at hand that makes the youngster sweat drops of blood, blanches his cheek and causes his hand to tremble, for verily, the spirit is willing but the flesh is weak.

Berlin, Washington.

—:o:—

We agree with you that it would be a good thing for some of the city brethren to "take a course" in practical surgery (medicine, too, for that matter) under conditions such as Dr. Greason describes. There certainly is no better method of developing self-reliance, nerve, than to practise awhile in the country. The man who is thrown entirely upon his resources is likely to become resourceful.

As regards the difference of opinions as to the value of the various antiseptics, it is quite likely we put too much weight on our own experiences. After all, the man behind the antiseptic is the biggest factor for success—or failure.—Ed.



Work your brains and keep in touch with people. Do something for others and forget yourselves.—George F. Butler.

Some live like a cucumber; cling to their vine and serve no higher end than rotundity and relish.—G. F. Butler.

Editorial Chat

SOME DIAGNOSTIC DANGERS.

NEXT to the prescription we may rank the art of diagnosis, as at present practised, as the most formidable obstacle to good treatment—to scientific therapeutics. Now, what a splendid opportunity we are giving the boys. Just hear the sarcasm that wells forth: "The CLINIC objects to diagnosis!" And as we are good-natured to-day, we'll give them still another chance by adding—the greatest stumbling block in the path of the young physician is his teaching as to diagnosis.

Let us ask Asmodeus to take us with the said young doctor on his rounds and see what he has carried from college. He walks into the sick-room, examines his patient, finds fever, abdominal symptoms, a tongue resembling a description he has read, and he makes up his mind he is facing a case of typhoid fever. So he makes tracks for a Widal, an examination of the blood, feces and urine, directs the room to be kept dark and cool, and waits for the confirmation of his suspicions. Then he waits for the attack to run its course, seeing to the diet, airing or ventilating the room, and if he has been properly impressed with its importance, he looks after the hygiene of the premises and surroundings. If the fever runs high he may direct cold baths. Otherwise he watches for indications demanding surgical intervention, and that's about all.

While we approve of all he has done, he has left undone nearly everything his duty as a physician demanded. In the

first place, his diagnosis has been imperfect. He failed to note that the presence of headache, boneache, nocturnal delirium, anorexia, heavy breath, and restlessness with insomnia, indicated toxemia; and that the fetor of the stools, nausea and flatulence pointed to the source of the poison. He consequently failed to flush the alimentary canal and disinfect it; which would have greatly relieved his patient, and subtracted materially from the sum total of the morbid symptoms.

Then he forgot entirely that at this stage of the malady there were comparatively few of the invading bacilli in the body, and that by saturating it with calcium sulphide he could prevent the multiplication of the microorganisms possibly, while his sulphocarbolates cut off reinforcements from the bowels. His examination of the pulse has shown a certain irregularity, with a tendency to weakness, which forebodes future heart failure; and he should forestall this by cautious and efficient dosage with appropriate tonics. There has also been manifest fever with undue rapidity of the pulse, and an inequality in the distribution of the circulation, and aconitine should have been added; while a dilatation of the pupil must have warned him of a tendency to ataxia, which tells of autotoxemia, and demands the clearing of the bowels by calomel and salines, with saline enemas; and the addition of zinc valerianate to the medicines, with

caffeine valerianate to increase the effect and stimulate renal elimination slightly.

Here is a whole lot he has found to do, instead of sitting with his arms folded till the diagnosis has been verified, and the malady has passed out of the period for most effective treatment. But he does not stop here. At every visit he finds reason for modifying his treatment, as the conditions vary. Fresh symptoms are manifested, and new emergencies arise, and his therapy, while remaining the same as to the main purposes, is adapted as accurately as his knowledge permits to the indications that present.

He is rewarded by a general amelioration of the symptoms, the discomfort and danger subside, and if he has been prompt, skilful and lucky, the evidences of typhoid become so dim that within a week he would doubt the accuracy of his diagnosis were it not that the Vidal has confirmed it. The case has assumed the aspect of an abortive or mild form, and after a week or more in bed the patient arises, and gets down to his office about the end of the third week instead of beginning a tedious convalescence at that time.

Diagnosis is all right, if the man only carries it out far enough, and diagnoses the conditions as well as the name of the disease; and if he sees that there are conditions that require treatment, no matter what is the name of the malady, and applies the right treatment without waiting for the name. Fever, local congestion or hyperemia, defective elimination, decomposing materials in the bowels, these and many more conditions require prompt and judicious treatment, no matter what may be the name of the fever.

Some time in our student days we heard an old physician remark that he treated lots of diseases that he did not know the names of; that they got well, and he knew how to cure them; and that satisfied him. In the strength of our learning we then despised that man. Now we would like to hunt him up and take our hats off to him.

Have you diligently read and comprehended your text-books? Then sell them, and turn to the greater book of Nature. You will otherwise be tempted to wrest all cases into the similitude of the descriptions you have read, in place of studying what lies before you. Every really great teacher gets his inspiration from Nature; and then the copyists follow him in place of the older texts, instead of resorting to the book from which he studied. Sydenham read Nature, and left an imperishable name, an indelible impress on his profession—but he said that scarlet fever was “merely the name of a disease.” What a revelation was Trousseau to the book worshipers. His “Clinical Medicine” seemed to have left the texts far below him, and yet he saw disease as it was, not as it had been described—that was all. Even today there is much to be learned from this work, and the numerous brood of similar works that followed it. But there is much more to be learned from that greater work from which all the clinicians gathered bits of truth, and this is the book that is least studied by the beginner today.

Forget your nosology; let the name-diagnosis wait for the end of the case; and diagnose what you have to treat, the presenting conditions. Apply your therapeutics to the fever, the pulse, the alimentary canal, the vasomotors, the heart,



Some live as a summer breeze in a meadow; they find hidden flowers and set the perfumes flying.—G. F. Butler.

Some live as in a seashell; their existence is but a sigh. Others as the fire in a diamond; they are all sparkle.—G. F. Butler.

the eliminating apparatus, the aching head, and not to the title of the malady. It is really much easier, and from it you learn to be a real practical physician. Form the habit of name-diagnosis, and it is exceedingly difficult to break. To recognize conditions and fit the remedies to them is much easier, and more satisfactory.



HOW TO LIVE.

One of the difficulties which beset the doctor on every side is that he is subject to constant misrepresentation, vilification and abuse, even from those who ought to be his heartiest defenders. Every new school, cult, or religion; every alleged "reform," social or economic; every new stripe of quackery (and their name is legion) commences its propaganda with an attack upon the medical profession. Even the unthinking clergy, who benefit more from the charity of the profession than any other class, and who should be as deeply interested in the physical as in the spiritual welfare of their people (*mens sana in sano corpore*) all too often lend their influence to our undoing, through their free-will offerings of testimonials to the patent-medicine fakirs and nostrum-venders who, under the guise of curers of the sick, are preying like vampires upon the public, fairly forcing their rum-remedies down the throats of the all-too-gullible public by means of their lying advertisements, supported by "testimony," bought, garbled or stolen, and made to fit their nefarious scheme of destruction—not infrequently using as their strongest argument "recommended by the medical profession."

To a certain extent medical men (you,



Some live as the blind mole in the soil; they outnumber all the rest; see nothing, feel nothing, know nothing, to eternity.—Butler.

Doctor) are themselves responsible for this condition of things, because they have so hedged themselves about with the ill-advised reticence which they honestly, though erroneously, believe is enjoined by the "code," that they will not rise in their own defense; and the public press, which fattens upon the advertising of these frauds, loses no opportunity to furnish any misinformation which tends to weaken the faith of the public in the doctor.

It has become a problem, how we are to put ourselves right with the people; how we are to let them understand something of the marvelous work our scientists are doing; how disease is being blotted out by the ablest and most disinterested work for humanity that any class of men has ever attempted; how medicine may and does relieve and cure and, *not less important*, how they, the people, are being victimized by a veritable "trust" of these soulless money-sucking vampires who not only fatten on their real misfortunes but the more so upon those most exacting imaginary ones for the creation of which they themselves are responsible.

There are a number of so-called popular medical journals. Some (a very few) of these are excellent; more are questionably tolerable, most are abominable. Even those of the better sort are, to a considerable degree, the organs of individuals or corporations with private interests or peculiar ideas to conserve or promote; few, very few, (we cannot think now of one) have in any sense at heart the interest of the doctor and the preservation of his influence in the community for the good and welfare thereof. Many (even most) of these journals are openly antagonistic to the doc-

Nothing is so inane and detrimental to health as people's talk on their aches, pains and troubles.—G. F. Butler.

tor; are doing everything in their power to destroy his hold upon the people, and to paint him as a creature to be distrusted and feared, as a man actuated by the grossest self-interest—a something to be shattered in favor of the special fad or fake which they promote.

Posing as advocates of physical culture, food fads and other foolishness, magnifying the possibility of the so-called "natural methods of cure"—mind cure, suggestion and the like (and always against the doctor), these sheets are exerting a tremendous influence upon the country, and a most dangerous one. All or nearly all of them are fighting vaccination, serum therapy (antitoxin, etc.) and directly or indirectly all methods of medicinal therapeutics. But run through their advertising pages and you will find represented the most vicious and "suggestive" things that can (but should not) escape the toils of a post-office fraud-order. We know that behind at least one of these magazines, one claiming a circulation of over 100,000, stands one of the most-widely advertised and most dangerous rum-remedy institutions, whose alleged cure-all, stronger in alcohol than whiskey, and many times stronger than beer, against which so much is and may well be said, is engrafting more evil on humanity in general than a thousand open saloons, and accursed as they are, is more to be dreaded for its insidious influence than is almost any other evil within our ken. And this is the kind of "medical literature" that is moulding the minds of the people! This is what is taking from the doctor the very bread of his mouth and using it to kill the soul and body of his neighbors and his friends.

There should be a popular journal behind which the doctor can stand. There is one! In *How To Live*, of which Dr. George F. Butler is the editor-in-chief, we have a journal published by doctors, intended to "hold up the hands" of the medical profession in its struggle to better the condition of men and women; and to this journal we give our unqualified endorsement and support, urging you, brother, to receive it with open arms and to secure its widest possible introduction in your community, that the truth may be known, and knowing it that your people may be able to oppose the wiles of the devil and be led to come to you in their time of need for that help and advice which, in its very fulness, you are so well able to give.

There are certainly few if any men better fitted than Dr. Butler to assume the leadership in this great work. He is a general practitioner of wide experience; as former superintendent of the Alma sanitarium for years, he has come into intimate touch with the most modern methods of treating disease, both with and without drugs; he is a teacher of therapeutics and clinical medicine in the Medical Department of the University of Illinois, and of practice of medicine in the Dearborn Medical College, both of Chicago, and is a well-known and polished writer both of medical books and of general literature as well.

How To Live and its editor have taken common cause with ourselves; they are now part of us; we have entered heart and soul into this work. The magazine, removed from Alma, Mich., will hereafter be issued from the CLINIC office, and we propose to use our utmost efforts to make it such a journal that



Three days' Chicago ads for a drug errand boy brought one lone applicant, tattered and dirty, willing to work for \$7.00 a week.

A promising production of camphor in China has been stifled by a syndicate that acquired a monopoly of export.

every doctor will see and feel in it an ally in which he can confide *and will not rest until he has introduced it into the homes of his clientele*. It will be clean from beginning to end. There will be no medical advertising of any sort admitted—nothing, if we know it, the spread of the knowledge of which directly or indirectly, will take one dollar from the doctor. Through *How To Live* we propose to instill into the minds of its readers that it is their duty to guard against these fakes and shams, and to go to the doctor when they are sick—that self-medication is *always dangerous, usually disastrous and often deadly*.

How To Live will be a family magazine, with departments for father, mother and the children—stories, poetry and the best of good advice on everything that interests and concerns the home. It is not to be a “health journal,” but a *help to right living*—a help to every one who really wants to know “how to live.” In other words, we propose to make it such a journal that you simply must have it on your home-table as well as in your waiting-room; so good and helpful that you will feel impelled to say to your patrons: “John, Mary, here is something you ought to have in your family; it’s just the thing for yourself and the children; it will help you to live *right*.”

How To Live is devoted to the health, happiness and betterment of the people. Through it we are going to fight the fight of the doctor among the people, and he will and must help us. As doctors we are going to “nail” the lies that are being told about us; we are going to stand up for truth and right; we are going to let in light on quackery and its methods; we are going to strike “with might and main” the alcoholic nostrums

and habit-forming drug dopes and show their dangers; we are going to do our part to maintain the sanctity of the home, to carry a message of real, genuine love and helpfulness; one that shall encourage and inspire all who read our pages. In *How To Live* we shall point the error as we see it and strive to show “the better way” of heart, of body and of mind, in home and in society; the true sociology of right living.

There will be nothing “namby-pamby” about *How To Live*, on the contrary it will be “very, much alive”; and we ask you to stand behind the movement. Will you do it? Hundreds of the CLINIC family, to whom the idea has already been presented, have answered “yes” with their subscriptions. Won’t you? (See ad page 78 for business announcement and subscription form.)

Brother, it *is* worth your while! You owe it to yourself to support this work—to help us to help you—and we want you to do it! We are in it, heart and hand, for real, genuine, helpful betterment. If you are with us, say “yes” with *your* subscription and *bring your friends with you*.



THE CRITICISM OF THE HYPER-CRITICAL.

Fair and intelligent criticism is a thing to be desired and is appreciated by every individual engaged in any work of importance to either himself or others. The greater and more wide-reaching the work, the more need of keen and wholesome criticism. At the same time it is essential that the critic should be familiar, from its various aspects, with the aim and object of the thing he criticises. Well meaning and



The Mann bill, that passed Congress, provides for the denial of patents on medicines, but leaves it on processes.

A German drug journal has discovered that sage is a powerful anhidrotic. Whee! Maybe it will hear of agaricin some day.

conservative friends (and occasionally some not quite so friendly) point out to us every now and again the impropriety of recommending in our pages the "trinity," "digestive," and "sulphur compound" granules *as such*, instead of prescribing "aconitine, gr. 1-134; digitalin, gr. 1-67; strychnine arsenate, gr. 1-67" (the component parts of the first-named granule), or "strychnine, gr. 1-134; quassin, gr. 1-67; papain, gr. 1-3" (which compose the second), and so on.

Now, those who are not absolutely searching for pin-holes would scarcely consider this as being a flaw in finished CLINIC material. From time out of mind certain well-known and established compound remedies have been briefly prescribed and spoken of by some concise, distinctive, accepted names. What doctor, prescribing Blaud's mass in pill form, ever writes more than "pil. Blaud," or "pil. Blaud with nux."? Or, if it be desired to give the compound cathartic pill (U. S. P.), what physician writes more than "pil. cathartic comp."? Who ever thinks of writing the formula of either in full, and what educated pharmacist or physician does not well know just what "pil. Blaud" or "pil cathartic compound" means? And who (save a very few), without a book before him, could prescribe either in any other way? The compound syrup of hypophosphites contains several ingredients: who ever writes the formula when prescribing it? Isn't it the universal custom to write "syp. hypophos. comp." and doesn't that term convey a definite and positive idea to druggist and doctor alike? If we wish any particular make of the syrup, then we may add "McArthur," "Fellows," or what not.

But the point holds good that well-known pills, granules, or mixtures of unvarying composition are, and always will be, spoken of and prescribed *by name*. If this be true of written prescriptions, how much more should it be so of printed ones (frequently repeated), when it costs so much per "m" to set up the type? How useless and expensive as well as annoying also, would it be to the well-posted reader, to print, each time we prescribe a standard pill or granule, the formula *in extenso*.

We have always taken particular care to give the formula in full of any remedy recommended which is not in common daily use. Even when such standards as the "defervescent compound," "digestive," are mentioned constantly, somewhere, as a rule, in that same issue the full formulæ are printed.

We believe that a journal with fifty thousand readers must be perused by some men who are as yet unfamiliar with the present development of active-principle therapeutics. So, also, the textbooks and other works mentioning "Blaud," "cathartic compound," etc., etc., are read by some men who are unfamiliar with the formulæ of these preparations. But by referring to the *Materia Medica* they can gain the desired information; and so CLINIC readers, unfamiliar with the standard compound granules of alkalometry, can find their full formulæ in the published lists and books on alkaloidal medication.

We are not taking the stand that it would *not* be more scientific—more dignified even, perhaps—to always write the exact formula of every preparation used, containing two or more ingredients, than to do as we do. If this were



Senecin is said to be useful in gastralgia, stomach cramps, and flatulent dyspepsia; two to five granules before each meal.

Weichardt reports an antitoxin that renders men impervious to fatigue. Russian papers please copy.

the case, and every physician strictly followed the rule of writing prescriptions in full, the nostrum evil would mighty soon be killed, and to that end it would be a good thing.

But taken in its broadest sense, the prescribing or writing of certain standard remedies *by name* has been, is, and will be the custom, by reason of its very conciseness and convenience, and we fail to see wherein we err when we speak of the "trinity," or "digestive," granules any more than the text-book author errs when he writes recommending "Blaud's pill" as "a good ferruginous tonic;" or "pulv. rhei comp." as "an excellent corrective for the hyperacidities of children."

In considering great matters it is essential to pay due attention to the minor and component parts thereof, but it would be absurd always to speak of a brick as "an oblong solid mass composed of clay ninety parts, sand nine parts and chopped straw one part, the whole carefully moulded and subjected to a temperature of 000 F. for 000 hours."

There is such a thing as being—hypercritical. Some people suffer from a peculiar neurosis which compels them to gag at a granule while they can swallow a ten-grain capsule of antiquity with unruffled composure—a case of the gnat and the camel!—for, one has the same *raison d'etre* readily accorded the other, but is of such nearness in the perspective as to be obtrusive to that class of individuals who do not dare criticize anything of ancient lineage or convention, but would ruthlessly "flay alive" the same idea or principle when utilized as a similar convenience in modern usage. We are in-

terested in medical progress, not in hair-splitting, quibbling—much ado about nothing.



MEDICAL TERMINOLOGY.

There is a so-called spelling reform already adopted by several editors of medical journals and the newer lexicons, that is misleading; reference being made to the common ending of alkaloids, glucosides, resinoids, in fact the entire group of active principles, with the termination "in."

An alkaloid is really a chemically defined entity and stands for a single, elemental substance. The other active principles are not, so far, to be included chemically, in the same group with the alkaloids. They are still chemically complex.

As written language is for the purpose of differentiation and classification of ideas, it is developed as our ideas develop—as compound ideas are resolved into their simple component thoughts. The alkaloids are capable of uniting regularly with acids to form salts, as is the case with other chemical, elemental bases. They should, therefore, be classified and distinguished as to their verbal terminology from other active principles, as they are chemically.

The accepted and established termination of all alkaloids is "ine," and distinguishes these bodies at a glance from the still undeveloped glucosides, resinoids, concentrations, etc., which end in "in."

As is frequently the case in reforms, the reformers in this instance were evidently incapable of the finer distinction herein involved and recognized by the



Did Musser really say the perfection of "preventatives" of disease is doing away with drugs? There's no such word.

The yellow poplar was once prized as a remedy for rattlesnake bites; used locally and swallowed. How about populin?

van-guard of therapeutic progress who practise alkalometry.

With all due respect for the right of others to think for themselves, and for any step tending to economy in the writing and printing of the language which will eliminate all unnecessary letters, the practice of spelling the names of alkaloids by leaving off the final "e," is, in our opinion bad usage.

It is bad usage because it is mis-usage. The thing came about when it was decided by our lexicographers, who became tintured by foreign influence, that the "ides" should henceforth be known as "ids." There can be no philological objection to this (although to many ears the long sound is more euphonious), because the compounds under consideration are *all* of the same chemical class. But, of course, when the linguistic carpenter got his new saw to working he didn't stop wherever he could lop off a final "e" and straightway, without recognizing that there was a fundamental difference between the *alkaloids* and the other active principles which should be properly indicated in the spelling of the names of those distinct classes, trimmed off the final "e" and went on his way to complacently perpetuate his error by introducing it into the next edition of his lexicon—to which reference might be made as an "authority," an authority that in our opinion has mightily blundered and is leading many others to blunder.



OF THE RUT, RUTTY.

Here comes the old doctor! Not so very old in years either, but old in all else—why, he is covered with cobwebs; coat needs brushing, trousers uncertain



E. J. Brown has been elected professor of histology at the Chicago Eye, Ear, Nose and Throat College.

about the heels, hat out of date long since; he smells of drugs—and carries some pills loose in his right vest pocket—a lump of something else in the left.

He scowls at us when he hears we are a doctor—like Towzer when a strange dog approaches, he receives us with instinctive antagonism. He draws into his shell; will not let himself out far enough to be caught; and receives with incredulity and suspicion anything we may offer "for the good of the order."

Bless his good soul! We would like to sidle up beside him if we dared and give him a gentle hug of appreciation; for we know what a life of unappreciated self-denial has been his; how many unrecognized kindnesses he has done his fellows, and what a power for good he has been to his community.

And then we would shake him hard, till the pills would fly out of his pockets. Lambast him good and plenty, till the smell of rhubarb and mixed drugs could not be detected even with a spyglass to one's nose. Then we'd stand him up in a corner and tell him what we think of him; how he has stood still so long that his feet have taken root; has walked his rut, when he could walk at all, until it is so deep he cannot see out of it; has narrowed his therapeutic resources till those C. C. pills in one pocket and that lump of gum opium wrapped in a bit of toilet paper in another constitute his *matéria medica*. We'd try to make him so mad at us that he would go home and read up for a month in some of the new books we would send him—just to get even with us.

How can this doctor be coaxed out of this rut, and made to think for himself? He has vast stores of latent energies and

Hydrastis for many chronic catarrhs of stomach and bowels; especially those due to alcohol.—W. Blair Stewart.

capacities; he is a loser in the battle only because he is "loyal" to the antiquated methods which he still fondly believes to be "scientific"; and yet he could be such a force if he only knew it, and would adapt himself to the great therapeutic movements of the day. Quarry through his shell and you find the kernel well worth your labor in extracting. It "sure" takes work, but isn't it worth our while?

What do you say to this plan? Let's bombard the old doctor with ideas, till he stops thinking of himself as old. You do your part and we'll try to do ours and then let him come back at us. Send in your experience in the treatment of the every-day kind of diseases which interest him—and us. Talk of your successes, the splendid future of therapeutics—and the active principles. None of us cares so very much for the "science" that is so "high falutin'" in the way of putting things that it takes a German education and a Gould's Dictionary to translate it into sense! Then give us the doctor's name and we'll send him a copy of the CLINIC with your compliments. Between us can't we help the good gentleman to realize that "the world do move"?

Why not try it?



PNEUMONIA.

We have stirred things up some on this subject and propose to stir them more, for of all the abominations ever foisted upon the people for their destruction and to the detriment of the long-suffering profession this, that the medical man can do nothing for pneumonia, is one of the worst. Our personal sentiments were expressed in the columns of the *Journal of the American Medical Association*, January 29, and we reprint



Elatarium causes absorption of dropsies independent of the loss of watery fluid from the blood to the bowel.—Sewall, *Ther. Gaz.*

it in this issue. In this connection I will quote a note just received:

I hereby certify that I have treated seven cases of pneumonia, both lobar and lobular, with the alkaloidal granules. Result: Recovery in each case.

I wish that every case of pneumonia had to be reported, together with its treatment and the result. The treatment of these cases has been the best test to which I have applied the alkaloids.

DR. W. Z. ROBERTS.

Buffalo, N. Y.

So do we! Our columns are open. Let us have them. The profession can do much, has done much for pneumonia, and should resent any imputation to the contrary as an insult to their intelligence.



SOLANINE.

Numerous requests have come to us for information and literature on Dulcamara. The investigations of the properties of the horse or bull nettle have shown it to possess undoubtedly valuable properties as a remedy for epilepsy. Investigation showed the same active principle in these two plants; and we have gathered together all we could find concerning it and the plants; and the result is set before you in Dr. Waugh's paper.

The day has gone when the bromides comprised all there was to the treatment of epilepsy. The deleterious effect of these agents, their interference with digestion and depression of vitality, and the temporary nature of the relief they afford, all lead us to set them aside for any other method of treatment that is based on reasonable prospects of a true cure. The good results secured from the nettle, as attested by such authorities as Pearce and Hare, justify us in recommending solanine for trial in this

The Bulletin of Pharmacy is getting worked up over the invasion of the drug field by the "mail-order octopi." High time, too.

affection; and from it we should obtain more uniform and decided benefits than from the crude plant.

In pneumogastric irritations, respiratory and gastric, dulcamara has been praised by many practitioners; and since solanine sedates the peripheral terminations of the vagus there is justification for these reports. From the alkaloid we should obtain effects similar to those of emetine and codeine, without the objections accruing to the latter as an opiate.

Altogether we feel that in recommending solanine for clinical trial we have secured a valuable addition to our armamentarium.



AN EYE-OPENER FOR THE DOCTOR.

The two following editorials from the December issue of the *Apothecary* would afford ample food for thought for the doctor were we to reproduce them without one word of comment. The first shows how essential it is for the physician to *see* that his patient gets what he is supposed to receive. If, in a large city like Chicago, eight out of ten druggists dispensed something else in place of the aristol prescribed, what is the average substitution? Aristol will cure certain lesions better than any other remedy; colored fuller's earth has not such qualities. The doctor, whose reputation might depend upon the cure of a case calling for the use of this preparation would wonder why he failed to retain the patient whose prescription was filled with the "substitute," but the druggist got aristol prices for a worthless powder so he wouldn't care.

It has come to this pass: the physician must either dispense himself (and even

then he needs to exercise due care as to where he procures his supplies and what remedies he uses) or he must insist upon seeing the medicines procured by patients upon his prescriptions. Only so can he be positively safe. Of course there are exceptions to the rule; there *are* scientific and honest druggists, lots of them, who practice *pharmacy* but, unless the doctor is very sure *his* druggist is such a man he needs to guard his own interests as above suggested. And, after all, isn't it infinitely more satisfactory, more scientific, more in keeping with the doctor's high calling, for the practitioner himself to give such medicines as are needed by the really sick? Plasters, lotions and gargles may be prescribed, and even many mixtures, but potent remedies for serious conditions should be given by the doctor personally and he, with his own mouth, should explain their use—and the probable results which will follow their exhibition.

There is one right way of doing things; it is quite evident that in medicine to write prescriptions to be dispensed from an uncertain source of supply is *not* that way. To those who have had experience it is equally evident that the bedside dispensing of the active principles *is*. No possibility of substitution or sophistication then; no uncertainty as to effectiveness or potency. The doctor who carries (and uses) the alkaloids lives up to the Hippocratic oath and *is* what he professes to be—a *healer of men*.

The facts revealed by the recent aristol investigation in Chicago are horrible in the extreme; almost shattering one's faith in mankind. When 108 out of 139 supposedly reputable druggists are proven to be at least criminally negligent, if not wilfully criminal, it makes



A promising anti-cocaine crusade has been inaugurated in Cleveland by the police authorities. More power to them.

Ten men died in Ashland, Ky., from drinking a lot of wood alcohol they had rescued from a wrecked vessel.

one sick with disgust. These are strong words, but not so strong as the facts warrant. When a druggist, a pretender to professional standing, a claimant to at least ordinary intelligence, allows fuller's earth colored with oxide of iron to go into a prescription for aristol, as many of these men did, there is no excuse under the sun for him.

True, most of the druggists involved assert they purchased the stuff in good faith. That is, they admit they knew it to be a substitute for aristol, but thought it was "just as good." Think of it! The pitiable spectacle a man makes in offering such an excuse!

This is not sensational talk. We wish it were not a hundredth part as bad as we announce. But the truth is that when the real facts became known to some of those druggists in Chicago who really care for the good of pharmacy and have a pride in their profession, it made them sad beyond words. As another evidence of the terrible extent to which this fraudulent stuff was sold (though the above figures are evidence enough) it is asserted that one Chicago jobber in just one day after the story of the investigation prematurely leaked out through the postoffice department, which was assisting in the investigation, sold 429 ounces of aristol, more than before in months. If the fact that the investigation was being made had not leaked out it would have included every drug store in the city. As it is, the authorities have not stopped working, but it is hardly to be supposed that they will find many more cases like the above.

The samples for analysis were collected by a messenger boy and an adult companion, the former presenting a prescription for aristol signed by a certain doctor. In one case the messenger paid fifty-five cents for a quarter of an ounce of fuller's earth.

The only grain of comfort an honest man can find when he contemplates such conditions in a profession in which he is interested is in the hope that it is mostly

brought about from criminal carelessness, and not with a full realization of the matter, which would make it criminal intent.

The honest pharmacist has no fear of editorial criticism from any source and such are not considered in this article, but to be honest is not enough—the conscientious pharmacist should see to it that the drugs he dispenses are what the doctor prescribes, and that they are not substitutes. He has a perfect right, and it is good business to purchase his supplies of those who can offer the lowest prices—*providing* the integrity of the articles purchased and dispensed, is not only guaranteed by the jobber, but verified by the dispensing pharmacist, himself.

This incident is confined to aristol because its manufacturers have had the nerve to expose the fraud. It can be duplicated in spirit by writing 50 prescriptions for any standard *specified* preparation that does not belong to the *cheaper-but-just-as-good* class, and it is high time that the doctor awakens to this fact and the menace it entails.

Here is the other abstract from the *Apothecary*:

Mr. Edward Bok, of the *Ladies' Home Journal*, devotes a page this month to exposing the practices of a certain patent medicine firm, with which his informant held a high position for two years. Mr. Bok does not name the firm, but describes it as one headed by a celebrated "doctor." This doctor is nation-known, and as widely advertised, as a renowned specialist who gives personal attention to every letter written by suffering femininity, whose confidences, he advertises, he treats so sacredly as to forward all correspondence in "plain" envelopes, etc. But an intimate knowledge of the methods prevailing at this "doctor's" estab-

Chicagoans buying phenol stronger than 5 per cent get an alcohol and glycerin solution; and some lives have already been saved.

New York druggists called out of bed these cold nights may ask 25c for 15c worth of drugs, but cannot collect \$1 for them.

lishment proves that his ad-writer, at least, is a liar, with no truth in him. The hundreds of letters received daily are distributed to a corps of young men and women, who read through them just far enough to find a symptom, whereupon they put a number on the letter and pass it on to another set of young men and women, the number meaning that a particular one of a few dozen form letters will fit the case. If the letter happens to be "spicy," however, in its relation of mother's or daughter's secret trouble, more attention is given it, and it is frequently passed all around, or taken home for the edification of others. The letters through with, the names on them—and sometimes the letters outright—are sold to other firms.

And now the "treatment." The patient receives an early reply, assuring her of the attention her case has been given by the eminent "specialist" (who, per chance, has been on a yachting cruise for the last month), and advising her to try a certain remedy which just fills the bill, and costs "only a dollar, postpaid." There are four of these "remedies." One is 98 1-2 per cent water and the rest sulphuric acid, and one readily ignites. The other two are left to the already stimulated imagination. Usually the patient is informed that an analysis of her urine should be made. She sends the urine, whereupon, for a nice little fee, it is tested, the janitor performing that service by holding it over the gas jet for an instant to see if it turns color!

The "exposure" of the methods followed by the "eminent specialist" possessing startling features though the revelations made will not surprise some physicians who have long scented the rat behind the flowery advertisements of this concern. But it will surely cause chagrin and disgust to overwhelm those women who have been idiotic enough to entrust their secrets to an advertising shark. To have one's pelvic wrongs

sniggered at and discussed by a parcel of tom-fool clerks is bad enough, but to have oneself passed on to other jackals as an easy dupe is almost worse.

And then to realize that the dollar you paid for that "analysis of urine" helped to keep up the yacht and other luxuries of the "eminent scientist," while the urine itself received the ten-dollar-a-week janitor's attention! That is "too much" altogether!

The fact that the unfortunate dupe's disease which might have been cured by any ordinarily well-equipped doctor, grew beyond help, while the "guaranteed to cure" nostrum was being taken, has also some bearing upon the subject. That end of it, however, doesn't appeal to the "doctor"—the fellow with the yacht and a "four mixtures" materia medica.

It is a pity that the above account of what "really and truly" goes on in these iniquitous institutions cannot be read by every woman in the land. It is even a greater pity that the average physician doesn't fit himself to win the confidence first and then the practice of such patients.

Until the doctor at the door deports himself as a doctor should and proves his right to the title of "healer of ills," the far-off blow-hard "eminent specialist" will shine as something "eminently superior," and will capture the money and cripple the women.

The remedy is simple; the people must be educated, first, to respect and trust the practitioners who work among them and secondly to realize that any man who professes to cure certain diseases from a poor description and with

If c. p. means commercially pure, as it seems to in some cases, let us know it and adopt some new term for pure goods.—Bailey.

Manufacturers use the term c. p. carelessly, or put it on commercial grades of goods to secure a better price.—Bailey, *Bull. Pharm.*

internal medicines is, to say the least, a fool, if not worse: a knave of the most dangerous type.



A MAN WITH TWO STOMACHS.

Medical editors have to stomach many rebuffs, when recalcitrant advertisers fail to see the advantages of their respective periodicals, or get wrathful over expressions of opinion and withdraw the oxidizing plasma from the editorial bank account; when the spoiled subscriber persists in wanting material he can assimilate instead of what the editor prescribes, as what he should be able to utilize; when the diabolic printer turns his tribute to the fairest one from "sweet as the rose" into "sweat at the nose," etc.

But the difficulty we have experienced in keeping one stomach respectably filled leads us to protest at the attempt of Editor Patek to possess himself of a second stomach. No, not even if we possessed a free pass to the greatest of Milwaukee's thirst-queller factories, would we assume the extra responsibility thereby imposed.

We sincerely trust that Editor Patek, of the *Wisconsin Medical Journal*, will have succeeded in convincing the court that he did not purloin the organ aforementioned, which some citizen of the malted metropolis seems to have mislaid.

N. B. As this item may reach Milwaukee, please add, in the words of Josh Billings: "This is a goak."



DRUG HABITS.

Livingston has recently called attention to the vasomotor paresis existing in persons who are stopping the habitual



Minister:—Don't bewail your husband; other and better men have gone the same way. Widow:—Have they *all* gone?

taking of alcohol, morphine, or other habit-drugs. This condition is met by cold applied to the spine, by galvanization of the cervical sympathetics, by dry-cupping the spine, by skilled massage, and by the hypodermic injection of ergot.

All the present systems of treatment for these conditions embrace the use of the tensors, sparteine, strychnine, cactus, etc. While we have not seen any record of its employment, hydrastinine would be more directly indicated than either of these or than ergot. Try doses of gr. 1-12 of the hydrochlorate, three times a day hypodermically.



PILOCARPINE IN STRYCHNINE POISONING.

In the *Journal of the American Medical Association* Meltzer and Salant treat of pilocarpine as a remedy for strychnine poisoning. A child in its third year had taken an indeterminate quantity of strychnine; it had emetics, morphine, chloral to narcotism, and yet the convulsions grew stronger. As a last resort it was given pilocarpine, gr. 1-24 hypodermatically, repeated in eighteen minutes, producing its full effect. The convulsions ceased within an hour. This case is analyzed by the authors. In experiments on frogs the addition of pilocarpine always increased the toxic effect of strychnine. The same proved true in regard to rabbits. The authors conclude that recovery ensued in spite of the pilocarpine, not because of it. The report concludes as follows:

Pilocarpine is a poison and some authors state that in some cases it can even cause convulsions, like brucine, nicotine, etc. If that child would have finally succumbed to the poisoning, in the face

Druggists make 100 per cent on prescriptions, 20 cigars, 30 patents, 40 telephone, 10 on advertisements.

of our experimental results, we would have had no means to prove that the injection of pilocarpine did not have a share in the fatal outcome. Why do physicians forget the supreme law: first of all not to do harm? Physicians carry with them numerous alkaloids for use in cases of emergency. Their minds ought to be impressed by this obvious rule: On human beings each alkaloid should be employed only according to well-established indications for its use and not according to theoretical notions. Well-founded theoretical notions can and ought to be tested on animals.



LOOK UP THE COCCYX.

Among the little understood and less studied diseases are the nervous disorders of women. The wretched wife and mother who feels as though she were going to pieces, whose nerves each and all tingle and hurt, who laughs with a tear in her eye and cries with half a smile around her mouth goes from doctor to doctor, hopefully at first but in sheer desperation at last, with never a sign of real benefit. She tries the home cures, takes patent medicines and, unless she strikes one of the latter which contains an opiate of some kind, continues to suffer and becomes a burden to herself and her friends. If she gets the wrong patent nostrum she gets relief but also acquires the opium habit.

It is well worth the while of the general practitioner to make a study of just such cases, and the further he is from consultants and specialists the more necessary is it that he should be able to do something for such cases. Doubtless the reader has more than one such woman on his list. Has it ever occurred to him that there may be some lesion of the coccyx? These are not rare in

women who have borne children; in women who have had difficult labors they are frequently found.

Coccygodynia may occur in men as the result of a fall or blow, but it is much more frequently found in married women. The pain is not always local but whether this is or is not the case there is invariably more or less nervous disturbance. In fact, as has been suggested, many of the female nervous wrecks could be well were their coccyges repaired. In your old nervous cases think of this and examine the coccyx. First of all acquaint yourself with the normal anatomy, for the shapes which the injured bone or bones may assume are many.

Hirst in his *Diseases of Women* illustrates the types of injuries and disease which may be present and the illustrations impress forcibly upon one the fact that the coccyx is an uncertain quantity. There may be ankylosis of the entire bone from the sacrum downwards, though more often there is abnormal motility between the first and second bones, with a thickened intervertebral disc. Hirst points out that this may be due to hard work, violent coitus or pressure of fecal masses. Once the sprain exists the anatomy of the parts (muscular and ligamentous tension) prevents relief from natural causes.

One may encounter every variety of lesion from a slight displacement (sprain) to fracture of an ankylosed joint. Pain, when local, is referred to the extremity of the spine. Distress is present during defecation and coitus and pressure elicit symptoms of distress. An examination with the finger in the rectum and the thumb in the crease of the nates will reveal the condition though



Barker (*Brit. Med. Jour.*) uses beta-eucain and adrenalin in infiltration anesthesia; better results than with cocaine.

The eucain anesthetizes the part and the adrenalin enhances and prolongs the effect; no depressing action.

it takes a trained and sensitive finger to recognize lesser luxations. If it is possible to feel a lower fragment which is out of line with the upper bone, or if sharp edges can be felt, fracture is evidently existent. Occasionally there will be redness of the overlying skin due to pressure by the projecting ridge of bone.

The entire spinal column may be painful and even a slight dislocation or displacement may cause the most varied and intense nervous symptoms. If the coccyx is intact it is well to examine for cervical tears, as these also set up a train of nervous symptoms. In examining the coccyx a constricted sphincter ani may be discovered and either rapid or gradual dilatation will remedy a long existent disorder.

It is not the intention of the writer to deal with the subject further; he merely desires to call the physician's attention to a much neglected and almost unthought of source of trouble. The official surgeon grows to believe that all disorders may be traced to some abnormality of the orifices of the body or the canals leading thereto, and he doubtless has grounds for his belief. The disorders described, together with adherent prepuce, fissures, fistulæ, "piles" and carbuncles, will account for at least half of the nervous diseases which have become an opprobrium.



MEDICAL MEN IN THE NAVY.

The Medical Bureau of the United States Navy still complains of its inability to secure a sufficient number of qualified medical men to fill the vacancies in the corps. The simple truth is that the rank and pay offered are not

sufficient to attract the class of men who are able to pass the very strict examinations. Some day the authorities will awake to the need of supplying the requisite men by educating them as the line officers are now prepared at Annapolis, at the expense of the government. The education of a physician now costs about \$5,000 to \$10,000, in money and time; and men who are well qualified have little inducement to go into the navy and get about a bookkeeper's small salary.



DR. THOMAS H. MANLEY.

We regret to announce the death of Dr. Thomas H. Manley, who has been an occasional contributor to the *CLINIC* for some years. Indeed, probably the last paper from his pen appeared in our columns last month. Dr. Manley was a surgeon of more than national reputation, well known as a writer as well as a careful operator, an original thinker and a fine teacher. His death was due to pneumonia.



HYOSCINE POISONING.

From England we receive note of a case of hyoscine poisoning. The physician ordered this remedy in doses of gr. 1-200 at bedtime; but the druggist reading gram for grain, put up 15 times the desired dose. Deep coma ensued; strychnine was properly given but weakened by brandy thrown in the rectum. Then the physician seems to have been bewildered for he injected morphine, and caffeine to antagonize it, hypodermically. Naturally, there was "little or no im-



Silbermark (*Wien. Klin. Wochenschr.*) prefers beta-eucain to cocaine in spinal analgesia; he used it in 232 cases with good results.

A French scientist has discovered that the microbes exchanged during kissing are of the beneficial kind—great for dyspepsia.

provement." Then the stomach was uselessly washed out, and strong coffee administered in full doses—a lucid interval evidently having taken the doctor. Improvement ensued in an hour, with recovery eleven hours after taking the hyoscine. The patient was 69 years of age.

The reporter very properly calls attention to the danger of the conjoint use of the two systems of weights, metric and apothecaries, and urges that the former be used exclusively. (We have just received a letter in which the writer quotes the Bible to show that the metric system originated with the devil and its use is impious.) But a more important deduction from this case is that the doctor should comprehend the action of the medicines he presumes to administer, and the proper antidotes for overdoses. Moreover, had he administered his hyoscine by the intensive method, gr. 1-1,000 every five to fifteen minutes till effect, he would not have had the smallest possibility of such a dangerous accident. When people employ alkaloids let them do so in the way experience has shown to be most desirable.



COURAGE ESSENTIAL TO SUCCESS.

It is sometimes said that he who hesitates fails. It is also said that "second thoughts are best," and we are advised to "look before you leap," etc. These and many similar phrases but express two extremes in various ways, and between them lies the truth.

The astute, well-grounded physician, the one who is fitted by nature, by training and experience for his profession,



We may now expect a widespread epidemic of dyspepsia! A pleasant "cure" like this ought to be exploited.

will decide and act, and usually act right, so promptly that he may seem not to look before he leaps; yet he does look, and although he may not be "cock sure" he is right before he goes ahead, *he goes ahead anyway*, following principles regarding which there can be no mistake. Nine times out of ten his prompt action checks the trouble in its incipency before organic change can have taken place.

This is abortion of disease made possible only with arms of precision and by this kind of a man.



DON'T PROMISE TOO MUCH.

It is not always the wisest thing to tell your patients just what is the matter with them or *what* you are doing to cure them. You yourself have first of all to find out just what treatment will work best in that particular case and if the first medicines fail it is a good thing to be able to change without having to admit that you were at fault. If you can, however, enter, as it were, upon the "second stage" with new remedies, the patient thinks that something has been accomplished by the prior treatment and is satisfied. In fact, make your patients realize that *you* are the *doctor* and that it is your province to cure, their's to obey. Don't either, unless you are very sure of your ground, make statements like "I'll have you well in two weeks," or "Ten days from now you'll feel like a young colt." That's bad policy. Tell them that they will soon be well and that the more closely they follow your instructions the sooner they can be discharged. Inspire confidence but make few promises with a time-limit.

Another prospective cure for cancer is in sight. The New York state laboratory has succeeded with mice.

GLEANINGS FROM FOREIGN FIELDS

Translated by E. M. Epstein, M. D.

ACUTE PLEURISY WITH EFFUSION.*

MR. B., commercial clerk, aged 46 years, was suddenly attacked with a severe chill, on the evening of February 14. He was weak, had considerable headache, and some fever. Thinking it a passing malaise, perhaps la grippe, he went to bed without eating, hope to be able to resume his occupation on the morning of the 16th. With this in view, he took a purgative and remained in bed all the day of the 15th.

On the evening of the 18th, the patient not feeling better, I was called to see him. Inquiring after his antecedents we found all the symptoms of chronic bronchitis, dating for some years past. The patient had a slight continual dry cough in the morning, some white and frothy expectorations, difficult to raise, abundant night sweats and occasional diarrhea. There were painful points in the dorsal region, and some emaciation, dating a few months past.

Examining Mr. B., who had repeatedly had slight irregular chills the day before, we found his temperature to be 102.2° F., pulse small, hard, and accelerated. On the right side and below the nipple, he felt a severe "stitch," forcing him to immobilize that side in order to obviate the pain, which was aggravated on the least motion. There was also dyspnea, considerable respiratory embarrassment, and a short fitful cough. On inspection we found a slight

arching of the right thoracic side, and obliteration of the intercostal spaces.

On palpation we found the liver reaching down a finger's breadth below the false ribs. There was complete absence of thoracic vibration.

On percussion there was complete, absolute dullness, reaching up to three finger's breadth below the clavicle. Auscultation gave egophany and aphonic pectoriloquy.

Two days before, at the suggestion of friends, he consented to have a fly blister 12x12 centimeters (equal to 5x5 inches) applied to the painful spot. Some dry cups also were applied to the chest. For some hours after this the respiration became easier and the stitch in the side less painful. Next morning the symptoms resumed all their former intensity, and after four days and sleepless nights, the patient found himself extremely fatigued.

We had here an acute right side pleurisy at the full period of effusion, and estimated the fluid at about a quart and a half or two quarts. We ordered, immediately, the application of ten wet cups, and our first care was to combat the fever and the stitch in the side, try to arrest the effusion, and sustain the heart of the patient. He took a compound defervescent granule (dosimetric trinity), together with a granule of cicutine hydrobromate for the pain in the side, and as a sudorific one granule of pilocarpine nitrate. Very hot grog, at

*This case is reported by Dr. Bercher in *La Dosimetrie*.

pleasure, revived the patient and facilitated the perspiration. To unload the bowels he took a tablespoonful of saline every second day, which assisted in the absorption of the various granules.

On the morning of the 19th the temperature was 101.84° F. The pain in the side was considerably less, and the patient fell into a slumber after an hour, from which he woke after some little while. On examination no change was found in the right side of the thorax and auscultation gave the same signs as before. Only the dyspnea was nearly gone and after a while disappeared altogether, and reappeared only upon a fit of coughing.

On the evening of the same day the temperature was 102.2° F. The compound defervescent granules and those of pilocarpine nitrate were continued.

On the 20th the dyspnea and the stitch in the side disappeared. The patient slept for an hour. He perspires freely. His urine is red and loaded. The temperature is 101.6° F. in the morning and 102° F. in the evening. Up to the 23rd of the month the daily doses of granules were ten defervescent and ten pilocarpine nitrate granules.

On the evening of the 23rd the temperature was 101.2° F. Perspiration was yet profuse, the urine scanty, and the patient complained of difficulty in its passage. The fever was not high, so the patient discontinued the dosimetric trinity and began to take the following combination: Scillitin, strychnine arsenate, of each ten granules. One tablespoonful of saline every third day.

On the 28th of the month we saw the patient after an absence of two days. The effusion was being absorbed; it was at the first examination at the level of

three fingers' breadth under the clavicle and the respiration was *nil*, now it is audible over a good part of the lung. The temperature is normal in the morning and in the evening it fluctuates between 100.2° F. and 101.3° F. The pulse is slower and fuller. There is still a persistent feebleness, which is rather disquieting, due to the shock and mental shake-up which the patient underwent, and a little too to the amount of sudorific alkaloids he absorbed.

He will take daily ten granules of strychnine arsenate in a little grog and as much of pilocarpine, and every two hours a granule of quinine hydroferrocyanate.

The urine is coming again in appreciable quantity, and is slightly albuminous. On auscultation there is clear breathing and friction sounds showing absorption going on. After this period the same signs continued, and on March 5 there were audible clear friction sounds at the base of the right lung.

The patient demands food, his strength is coming back gradually, and on March 15 he went out of doors for the first time. From that time on he takes regularly six granules of strychnine arsenate daily and as many times a day of the following combination: Iron arsenate, quassin, and quinine hydrobromate.

There is nothing abnormal now about the right lung.

REMARKS.

The more salient point in the above two cases (this case and the case of pericarditis reported in January) is the beneficial action of the pilocarpine nitrate on both the pericardiac and pleural effusions. This alkaloid acted as an energetic cardio-vascular incitant, pro-



The mice cure consists in injecting diseased rodent with serum from immune mouse. Will the immune man furnish serum?

Havelock Ellis says that civilization consists in making the world ladylike? Women are more civilized than men.

voking a very free secretion of the sudoriparous and salivary glands which was of immense service to us. While its administration may be more dangerous than that of other remedies, yet it is perfectly safe, sure and inoffensive by the method of divided doses.

We must not forget the wonderful action of that vital incitant strychnine arsenate, which always makes itself felt upon a debilitated organism, as well during the acute stage of a disease as in convalescence, acting still better when the digestive canal is unloaded of all impurities by the prompt action of the saline laxative, which promotes its more easy absorption.

These two alkaloids, the one provoking the absorption of the effusion and the other sustaining the enfeebled organism gave us a fine opportunity of obviating a thoracentesis which is always painful and at times even dangerous.



BIRCH LEAVES AS A SOLVENT OF RENAL CALCULI.

This is recommended by Winternitz, of Vienna. It is a non-irritant diuretic. A case among others is reported in which the diagnosis was concurred in by a number of physicians and confirmed by an x-ray examination; it was treated with a decoction of birch leaves, and the patient is perfectly well. There were no more colics, no subjective complaints; the urine showed nothing abnormal, albumin and pus globules were absent, and the uric-acid salts could not be found from the freshly voided. The urine was examined two months afterward and was found normal, as before. Subsequently an x-ray picture was taken and

not a trace of the calculus could be detected.

The birch leaves are gathered in the early summer, dried, and powdered. A heaped teaspoonful is infused with a half a pint of boiling water, let stand for five minutes, then boiled for five minutes and strained. This dose is taken in the morning on an empty stomach, and a similar dose at 5 p. m. The treatment should continue for six months continuously, then twice or thrice every four weeks, and at a similar interval.

Dr. Jaenicke of Breslau has treated a number of cases successfully in this way for the last four years.—*Zentrabl. f. in. Med.* 1904, No. 13. In *N. Y. Med. Monats.*



EPILEPSY.

Epilepsy, Its Prognosis and Therapy, was the subject discussed by Aldren Turner before the Royal Medical Society of England at its meeting of July 9, 1904. He observed 365 uncomplicated, idiopathic cases of epilepsy during two years at least. The prognosis was formed according as the disease was due to heredity, although the cessation, or amelioration of the disease was not to be given up. The age when the disease first showed itself was an important circumstance in the prognosis, which was worse when it appeared before the tenth year of age. The cured and uncured cases are equal when the first appearance was between the fifteenth and twentieth year. The greatest percentage of continued attacks are among those where it began between the twenty-fifth and thirty-fifth year. From that period of life on, the malignity of the disease abates. A further influence upon the prognosis is the



Women have larger brains than men, especially in the frontal region.—Ellis. Carry the news to Germany.

According to Ellis, men are superior to women mainly in one thing—muscle. We "ain't such punkins," after all.

duration of the disease. In the first five years of the existence of the disease, treatment has better prospect of success, although it may be cured, or at least improved when it has lasted twenty and thirty years. The unsuccessful and the least improved cases are those in which the attacks are daily or weekly, and most of the cures are those in which the attacks occur but once or twice a year. Cases of severe attacks are easier to overcome than those where severe and light attacks alternate, and most difficult to overcome are cases of light attacks only.

Marriage, if it has any influence on the number of attacks, is but insignificant. Pregnancy can at best have but a temporary ameliorating influence. The puerperal state seems to increase the disposition to attacks. Lactation has no influence. Cases where remissions have lasted many years spontaneously, or by treatment, give a good prognosis, but this cannot be identified with a cure. From the gathered data it was concluded, that a cessation of attacks for nine years gives the best hopes for a perfect cure, in which cases the percentage of cures was 10.2.



OXALIC ACID POISONING.

Oxalic acid poisoning and acute pancreatitis concomitantly in a case, was reported by F. Taylor to the Clinical Society of London in 1903. A man 68 years old, drank a solution of oxalic acid by mistake for water. Emetics were given (with what effect is, carelessly, not stated) but in spite of them there supervened trembling, weakness and cyanosis. Conditions improved during the course of the day. There was also emphysema and bronchitis. He was dismissed, at his



Physalix' vaccination for dogs' distemper has been tried in London by a committee, and has proved a failure.

request, from the hospital, and arrived at his home very weak, a distance of five or six miles. Two days later he was received into the hospital again. Most prominent in the disease symptoms were those of progressing bronchitis. Twenty days from the beginning of the trouble the man died. The postmortem showed, together with emphysema, purulent bronchitis and pleuritis, also infiltration of the omentum and pancreas. [The GLEANER picked up this report on account of the last two postmortem findings, because they are not mentioned in Peterson and Haines' Legal Medicine and Toxicology, 1904, nor in that small but very valuable Toxicology by Riley.]



THE PASSAGE OF A PILL.

The passage of a pill through the digestive tract was traced by Sicard and Infroit. It was made of colloid matter and filled with bismuth, so that when the canal was illumined by the Roentgen rays, its passage could be seen through the body walls. It was taken on an empty stomach. It was seen for half an hour in the fundus of the stomach, eight hours after that it was seen in the cecum, where it remained from four to six hours. It remained in the transverse colon from two to three hours, and in the descending colon from three to four hours. Between the twentieth and twenty-fourth hour it was seen in the sigmoid flexure, and after that it was expelled with the feces.



Chantemesse traced the etiology of phlegmasia alba dolens to an overloading of the cells with sodium chloride, on the reduction of which to a minimum the diseased phenomena rapidly receded.



Von Behring has succeeded in rendering cattle immune against tuberculosis by intravenous injections of human cultures.

MISCELLANEOUS ARTICLES

PNEUMONIA: A MODERNIZED SUCCESSFUL TREATMENT.*

THE weekly report of the Chicago Health Department for Dec. 17, 1904, shows that there were 95 deaths from pneumonia during the preceding week; and the report for a week later tells us the number had increased to 114. Since this is but a token of the vast increase in the mortality from this malady during the past few years, we may wisely ask why this is so, and if, as a prominent Chicago surgeon lately claimed, "there is no medical treatment for pneumonia."

Looking over the more recent articles on this topic in the general medical periodicals, we fail to find much evidence to contradict this bold assertion. Apparently, there is hardly a trace of a decisive, vigorous therapy, based on any distinct conception of the indications. One by one the weapons of preceding generations have fallen from the hands of their successors, and the paralysis of doubt and uncertainty has supervened. The only measure about whose value there seems to be a reasonable degree of unanimity is the employment of cardiac tonics—strychnine, digitalis and cocaine. Apart from this, the attitude of the doctor seems to be that of a sympathetic but helpless spectator of what too often proves to be a defeat.

The heart tonic is good in its place, but, despite the vivid encomiums of Juergenson and his school, it by no means comprises the entire therapy of pneu-

monia. The writer has seen a man die in the early stages of pneumonia from the injudicious pushing of strychnine, inspired by reading Juergenson. The great majority of hearts carried their owners safely through pneumonias at the time when every patient was bled freely, purged, puked, blistered, and fed on tartar emetic, calomel and water-soup exclusively. The human constitution and the nature of the malady cannot have so radically altered that every heart needs sustaining nowadays, if all needed, or a majority survived, universal and powerful sedation, fifty years ago.

Draw a wide line between the foregoing and the experiences reported by those physicians who have adopted the theories and practise of Burggraeve. There is no pessimism, no helplessness here; but the rather buoyant faith in themselves and in their therapeutic agents and methods, and the reports of results to justify their faith. Even if they were wrong it would be worth one's while to follow their ways if thereby such a faith could be won.

Let us examine the grounds for these theories and this practice; for, if the foundation be unstable, the structure cannot be permanent.

No one, nowadays, seriously questions the power of the pneumococcus to generate pneumonia, or of other microorganisms like the influenza bacillus to likewise induce pulmonary inflammations, *de novo*. But we wait expectantly for the therapeutics based on these or-

*Reprinted from *The Journal of the American Medical Association*, issue of January 29, 1905.

ganisms—it is long coming and not yet in sight. Meanwhile, and until we have something better, we must go back to the ancient pathology for a therapeutic basis. We were taught that the first step in a pneumonia consisted in dilatation of the pulmonary capillaries; then came diapedesis of white cells, possibly rupture of vessels and effusion of blood with exudation of red and white cells, fibrin, bacteria, epithelium, etc.

If the first step is not taken there can be no second. If the primary dilatation of the capillaries is relieved, the subsequent phases of the process must wait. Hence we relax the spasmodic contraction of the cutaneous and central vessels by giving sedatives like aconitine and veratrine, as our fathers did by giving antimony, while we restore tone to the parietic walls of the pulmonary capillaries by the use of strychnine and digitalin. By employing both principles at once we accomplish both indications, and thus obtain a more direct and powerful action than when either one of these therapeutic forces is put in operation without the other.

This is most conveniently accomplished by using small and closely-repeated doses of the above agents combined in accordance with the particular indications of each case. Thus we may administer aconitine amorphous, gr. 1-134, and digitalin Germanic, gr. 1-67, every ten, twenty, thirty or sixty minutes until the pulse and the other symptoms show that the desired impression has been made upon the circulation, then less frequently so as to keep up the desirable effect. If the pulse is unusually hard and the elimination deficient, as in what is known as sthenic pneumonia, we add to the above veratrine, gr. 1-134;

while if the heart is weak and the symptoms denote the asthenic type of the malady we add strychnine arsenate, gr. 1-134, to each dose. As the type changes from sthenic to asthenic, or *vice versa*, we change from one to the other of these triad combinations and back again. This enables us to pursue the same general plan throughout, but gives a *flexibility* to our therapy that has no parallel elsewhere. The tonic triad was devised by Burggraave, and by him denominated "the dosimetric trinity," while the sedative combination was put together by Abbott, and is termed "the defervescent compound." For convenience in dispensing, these are made up into single granules under the above names; but this is simply a convenience, not a necessity, and many prefer to make the combination as dispensed with single granules of each remedy.

But this does not strike at the root of the difficulty, for it fails to take into account the original cause of the circulatory perturbation, the toxemia.

Whenever the specific serum for pneumonia is produced we are ready to utilize it, and give it full credit for whatever value it proves to possess; but until then we shall do the best we can with the means at our disposal—and, fortunately, they have proved so successful that we await the birth of the serum with equanimity.

To begin with, these infectious fevers are not so simple in their pathogenesis. While in many cases specific micro-organisms have been discovered that are concerned with their causation, it does not follow that all the varied symptomatology of an attack is directly due to this one organism. Instead of this it is almost certain that a number of other



Hans, the wonderful thinking horse, proves to be a marvel of training; he ciphers correctly at the signals of a groom.

Roop is chicken diphtheria, not certainly identical with human; calcium sulphide at first gave good results.—Mack. Push it harder.

microörganisms and other symptom-producing elements enter into the case. Some of these are common to all febrile maladies, such as intestinal autotoxemia.

In all febrile states the intestinal and glandular secretions become scanty, the excretions are apt to be checked and morbid excreta retained in the mucous tracts. Under the influence of increased heat and lessened vital resistance, the toxins are generated in this inert, dead, decomposable nitrogenous material, laden with billions of many varieties of microörganisms, and absorbed into the blood with increased facility. Circulating throughout the body this flood of toxins influences unfavorably every vital function. This much of the toxemia at least we may remedy, by clearing from the bowels their unwholesome contents and disinfecting them—and the latter can readily be done to such an extent as to deprive the stools of all unpleasant odor, which suffices for all practical purposes.

Of what value is this procedure?

The writer has employed it for many years, in fevers of all classes, and is prepared to affirm that by it alone about one-third of the symptom-complex of any febrile attack is dissipated. The temperature falls one or more degrees, the headache, muscle-ache, nausea, anorexia, insomnia, delirium, restlessness and many other symptoms either disappear or are markedly alleviated. In many instances the case is relegated to the category of mild or even abortive forms; in all the improvement is too notable to be mistaken or set down to coincidence. By the application of this method alone correspondents have reported a clear sheet of recoveries from pneumonia, following a heavy death

rate, which still continued in the practice of neighbors who had not adopted the intestinal antiseptic method.

The details of the method employed are of less moment than the principle; but the following has proved more satisfactory than any other that has been tried by the writer: One-sixth grain of calomel (or one-sixth each of calomel and podophyllin) is given every half hour till one-half to one grain has been taken, and then enough saline laxative to flush the bowel freely; then the sulphocarbonate of zinc, from 30 to 60 grains a day, or more (though if the bowels have been thoroughly emptied it is rare that 30 grains will not accomplish the purpose). If this salt proves irritant to the stomach, the compound sulphocarbonates of zinc, lime and soda may be employed, with a little bismuth salicylate. After the bowels are disinfected a smaller daily dose will keep the stools free from odor.

Other antiseptic agents may do as well as the sulphocarbonates; the principle is the thing, but so far, in the writer's experience, no other has given as good results at so moderate a cost.

Unless the sulphocarbonates are especially prepared for internal use, they are apt to irritate the stomach. Very little of the grade found in the open market comes up to the requisite degree of purity for internal administration. Nausea following a dose of $2\frac{1}{2}$ grains, in powder, should be a signal for changing the source of supply. If the symptoms closely resemble those following the ingestion of an equal dose of zinc chloride, the writer can usually tell the factory from which the supply was derived for his prescription.

The above comprises the essential ele-



Who owns the prescription? The druggist must retain it as he does a cashed check, to show the transaction as a voucher.—*Nat. Drug.*

Potassium silicate is a universal cement, for wood, iron, stone, porcelain, glass, etc.—solution penciled.—*Nat. Druggist.*

ments of a treatment of pneumonia that commends itself to the physician as eminently successful. The details as to diet, sick-room hygiene, the removal of disease-sheltering collections of filth from the house and neighborhood, etc., are the same as under any other method, and are only alluded to here because the writer looks upon them, in a measure, as essential as the internal medication. Nor have I taken up the management of the emergencies and exceptional occurrences pertaining to the disease. My object is to urge on the profession the importance of the routine (but rational) treatment described, and to call attention to the excellent results obtained from it.

I have given no detail of cases, no tables of statistics. What's the use? Every physician knows the valuelessness of these. Pneumonia is a disease, *sui generis*, and each case stands by itself. That one man at one season, practising in one place, succeeded in carrying a score of cases through the forms of pneumonia then and there epidemic, has little bearing on another series of cases where all the conditions are different. The views so confidently expressed upon the value of this method are based not alone on personal experience for years, but on reports from physicians all over the country, in every conceivable form of the disease and under all circumstances. Some are more favorable than others—there are differences in the malady and in the men who give and who take the remedies. But this advocacy is based on reports from practitioners in city and in country in every state and territory in the Union. I will quote just one, by no means the most favorable, but showing the results achieved by a

man who is not an enthusiast, and is working in a climate exceedingly unfavorable to pneumonia—Dr. J. Tracy Melvin, of Saguache, Colo., who, following a long correspondence with the writer, reports:

"ONE HUNDRED CONSECUTIVE CASES OF PNEUMONIA."

FORM.		Died.	Recovered.	Aborted.	FROM INITIAL CHILL TO CRISIS.	
					MIN.	MAX.
Croupous. 53 cases.	Children, 14 and under. 16 cases.	0	16	7	69 hours.	84 hours.
	Adults, 37 cases.	4	33	8	76 hours.	102 hours.
Catarrhal, 47 cases.	Children, 38 cases.	5	33	6	Average Duration. 9½ days. 16½ days.	
	Adults, 9 cases.	2	7	0		
Total	100 cases.	11	89	21		

He adds: "Perhaps this treatment should also have credit for some forty recoveries of patients whose complaint threatened pneumonia, but whose symptoms cleared in forty-eight hours or less." That is a characteristic remark—whenever the doctor begins to apply this treatment to his pneumonia he begins to have trouble with his diagnoses—cases look like pneumonia, but the symptoms subside so quickly that he thinks he must have been mistaken. Yet such experiences did not occur until he began the new treatment, or at least were rarer.

Dr. Melvin analyzes his fatalities thus: Of 37 adult, croupous pneumonias four died. Two were chronic alcoholics, taken into miners' cabins after lying out a winter's night, and had no medical aid for thirty-six hours later. The third was also a chronic alcoholic who died in a relapse. The fourth was a girl of 20,



With melancholy one contemplates the long death roll of the world's great, who have succumbed untimely to the tubercle bacillus.

The tubercle bacillus is and has been, through countless generations, the most potent by far of death-dealing agencies.

and one of those inexplicable deaths of which every practitioner sees some. Of the catarrhal cases, five deaths were in children under two years of age; the two in adults were aged 72 and 81, respectively."

A physician of wide experience and more than average capacity said to the writer that in the elevated regions of Colorado, pneumonia was synonymous with death. This being the generally-accepted dictum, such a report as Dr. Tracy's means much more than a similar record in lower altitudes, and is, therefore, worthy of most careful consideration.

In the words of the writer of years ago, verified personally and in the experience of thousands of others, times without number, and to put it in a nutshell:

In full-blooded patients begin with aconitine, veratrine and digitalin (or in asthenic cases with aconitine, digitalin and strychnine), one granule of each every fifteen to thirty minutes until pulse softens; then every half-hour to one hour. Keep the pulse at 80 or under if possible; envelop the entire thorax in a thin jacket thickly "quilted" with raw cotton or the common cotton "batten" well greased or spread thickly with one of the standard osmotic glycerinized pastes, and applied thick and hot; in severe cases renew dressing every twelve hours; give a few doses of bryonin or hyoscyamine and codeine for pain.

Clean out the *primæ viæ* with 1-6 grain doses of calomel and podophyllin, half-hourly, till one-half to one gram of each is taken; two hours after last dose give a heaping teaspoonful of saline laxative in hot water and repeat every hour till bowels move freely; then give 5 grains of the compound sulphocarbolates—the 'intestinal antiseptic,' every two hours, or enough to keep the bowel

sweet and clean. This is of the utmost importance.

If seen early and properly-selected remedies are pushed rapidly nearly every case may be aborted. If patient is naturally weak, always give strychnine arsenate in place of veratrine. Codeine may be used to quiet cough, if required, and emetine to facilitate expectoration, cactin for prompt relief of heart waverings.

Secure complete defervescence and rest, no matter how much drug is required. Nuclein solution should be given in doses of twenty drops three times a day, taken on the tongue *without water*. Leave patient on strychnine arsenate, or triple arsenates with nuclein, and use the saline laxative and intestinal antiseptic, q. s., throughout the case, and following, as required; the gist of the whole thing being: *local protection, elimination, with forced defervescence, intestinal disinfection, systemic disinfection, and strong support to nature's fighting forces.*

Doctor, if there is really "no treatment for pneumonia," there should be no reasonable objection to giving a trial to a method for which so much is claimed as for this one. I do not ask you to set aside an established and successful method to give place to a new and untried one. If your present system is unsatisfactory, try this; at any rate, you are judge and jury: and the method and the principles on which it is founded are open to consideration. If there is reason in them, and there surely is, no practitioner can afford to neglect this or any means of treating pneumonia that promises a chance of success.

Chicago, Ill. W. C. ABBOTT.

PNEUMONIA CURED AT SEVENTY-FOUR.

I was recently called to see a lady seventy-four years of age. She had

What a rip-roaring time there would have been had John Paul Jones lived to take part in the War of 1812. Tubercle!—Huber.

Le Page, Rachel, Crane, Stevenson, Schiller, Sterne, Bunner, Keats, Nevin, Weber, Chopin, Lanier. Tubercle!—Huber.

pneumonia in the lower right lobe of the lung, and suffering greatly. I gave her a hypodermic of morphine, gr. 1-8, and atropine, gr. 1-100. I then ordered the dosimetric trinity granule every two hours till the fever was lower (103° F. nearly), then the aconitine every two hours, gr. 1-134, till the fever was below 100° F.

Breathing was difficult. I gave her glonoin, gr. 1-250 with emetine, until she was better. I gave arsenate of strychnine every three hours to brace her up. As a tonic, after the lung commenced to clear, I used the triple arsenates, three after each meal. She made a slow but sure recovery.

G. M. SOUTHERN.

Lincoln, Tex.

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Why should these old patients who get pneumonia be thought "as good as dead?" They *are* cured—many of them. Every alkalometrist knows this.—ED.

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QUININE IN PNEUMONIA.

You ask me for something on pneumonia. Let me give you the following: Professor A. B. Palmer was for years dean of the Medical Department of the University of Michigan, and lecturer on the practice of medicine. He practised medicine in the pioneer days of Michigan when malaria was prevalent. He was a close observer and soon discovered that when one of his malaria patients contracted pneumonia that the quinine which he gave to overcome the malaria seemed also to quickly abort the pneumonia. Years of observation proved to his mind that this was so, and for years he strongly impressed this state-

ment upon the minds of the medical students who listened to his lectures. Let me quote from his printed notes:

"When called to a patient with pneumonia within twelve to twenty-four hours of the chill, or at any time before any considerable exudation has occurred, I immediately give from 6 to 10 grains of quinine together with from 1-4 to 1-3 grain of morphine, which almost invariably, in a short time (from one-half to three hours) induces free perspiration and a reduction of temperature. I then repeat the quinine in doses of from 4 to 8 grains, in from two to three hours, and unless all pain and uneasiness is relieved, I add another dose of morphine in from four to six hours; but by all means continue the quinine in one of the last mentioned doses until from 30 to 50 and sometimes 60 grains are given. Sometimes 20 to 35 grains will be sufficient, given in three divided doses or, if preferred, somewhat smaller and more frequently repeated doses; but as the larger quantities are innocent and may be needed I prefer to give at least 30 and often as much as 40 grains in from twelve to twenty-four hours."

Professor Palmer goes on to say that there is a rapid decline in the severity of all the symptoms. This treatment is followed up with a mercurial and saline cathartic and in a large per cent of all cases the pneumonia disappears in from two to four days.

Permit me to say that I have followed the treatment for twenty years and it is not often that I see a case continuing over the time specified by Professor Palmer. I have seen my most violent cases aborted in from thirty-six to forty-eight hours.

Outside of some nausea or vomiting

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Bashkirtseff, Bichat, Godman, Laennec, Purcell, Sterling, Timrod, Artemus Ward, H. K. White, Thoreau, Spinoza, Tubercle!—Huber.

The chief mode of communication of consumption is from the dried sputum of consumptives. No spit, no consumption.—Egan.

I have seen no injurious effects from the quinine. Professor Palmer recommended, and I have followed the advice, that even in cases in which solidification has occurred before seeing the case that the same treatment be carried out, as it will almost insure against a further spread of the inflammation.

To the above treatment I add a mustard plaster and a cotton-batten waist. I have also used, in a few cases, amorphous aconitine, as recommended by Dr. Waugh, and with apparent success; in fact I sometimes combine the treatments. When pneumonia reaches the last stages it is a dangerous disease and the doctor should shun no effort to put a stop to it in the first, or congestive stage, if possible. The life of the patient may depend upon it.

V. E. LAWRENCE.

Ottawa, Kan.

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Has anyone else tried the quinine treatment? We confess that it seems a little too vigorous to us. Quinine idiosyncrasies are by no means uncommon and the results often "nasty." Then, the alkalometric method is so pleasant and, what is better, so certain in its results, that we can see no good reason for a change. Possibly the good results in Dr. Lawrence's cases are due to the increased leucocytosis which quinine is said to produce.

We know that in cases of pneumonia in which the proportion of leucocytes is large the prognosis is usually good.—
Ed.

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A CASE OF PNEUMONIA JUGULATED IF NOT ABORTED.

Harry McG., thirteen years old, a pale, puny school boy, was taken with a

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Send to Dr. J. A. Egan, Springfield, Ill., for pamphlet on the Cause and Prevention of Consumption; outdoor method.

severe chill on the evening of January 12, followed by fever and pain on the left side of the chest.

I was called the next morning, January 13th, and found the boy with a pulse of 120, temperature 103° F., respiration 30, and painful, and pain all over the lower left lung, extending over the abdomen on the same side; the latter pains I attributed to the terminal filaments of the lower intercostal nerves, as they spread over the abdomen. His cough was painful and there was some vomiting; crepitant and subcrepitant rales; some dulness on percussion extending up to the fourth rib.

I opened his bowels with broken doses of calomel, and exhibited granules of aconitine in doses suited to his age, every half to a whole hour, as the fever went up or down. I also applied a glycerinated paste, hot, to be repeated every twelve hours. No nourishment but milk was given.

January 14 the pulse was 108, respiration 32, temperature 102° F.; dulness had increased and he was spitting a viscid mucus mixed with blood. Pain over the chest was very severe, particularly on coughing; rales as before. The aconitine was continued.

January 15 the pulse was 85, respiration 26, temperature 100° F. He still had pain, but probably not quite so severe. He complained of being hungry and demanded something to eat early in the morning. Treatment was continued the same as before and a tablespoonful of "oil" given to open the bowels.

January 16, the pulse was 108, respiration 36, temperature 104.2° F. The patient was worse in every way, and upon inquiry I found that, inadvertently, they had allowed him to sit up the day

Gilbert, *Clinical Excerpts*, advocates venesection for strychnine spasms, eclampsia, mania a potu, etc.

before. He was very restless, and delirious at times. Rales not so plain; dullness on percussion marked. I put the boy on defervescent comp., with strychnine, according to age, and gave medicine every half hour.

January 17, the pulse was 102, respiration 40, temperature 104.4° F. Painful cough and breathing and other symptoms about the same. Defervescent continued as before, adding emetine 1-67 grain ever hour. I ordered a good dose of saline laxative. Family and the doctor were both anxious.

January 18, the pulse was 100, respiration 48, temperature 104.6° F. This is in the morning. The patient was delirious; vomited milk curds. Local symptoms seem much the same. Defervescent mixture and emetine continued every half hour. Diet of predigested beef. I promised to visit the patient in the evening. Evening at eight p. m., the pulse was 76, temperature 101.3° F., respiration 30; patient resting. I put the patient on dosimetric trinity, emetine and zinc sulphocarbolates as intestinal antiseptic, as bowels were somewhat more markedly tympanitic. We have our reward from the treatment at last.

January 19, pulse 70, respiration 22 and painless, temperature 98.3° F. The lungs have cleared up and there is no local pain on pressure. Cough is not painful and expectoration is rather free and easy. Emetine was continued hourly and the dosimetric trinity given only every two hours. Calomel was given in broken doses, followed by seidlitz powder to clear the tongue. The boy wants to get up but is not permitted. He is practically well and this is but the seventh day.

Large gall-tones inserted in the gall-bladders of dogs disappeared within six to twelve months.—*Journ. Physiology.*

This, it will be admitted, was a fair picture of pneumonia, jugulated right here in the city of Chicago, where one year ago men declared in the Chicago Medical Society, that there was no effective treatment of pneumonia. They will catch on soon. I send in the report of this case at once, that others may be benefited by its lesson. Had this boy not sat up on the fourth day of the disease, the case would have been aborted. As it is we did good work with our little bullets.

ROBERT PETER.

Chicago, Ill.

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Now here is some of the evidence. The medical men who practise the alkaloidal way of treating pneumonia are not inclined to make the gloomy prognoses that characterize the do-nothing school of therapeutic nihilism. Of course, not every case of pneumonia will recover, but most of them will if they are treated in a modern way.—ED.

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COLD IN PNEUMONIA.

In the *Medical World*, Nov., 1904, page 481, we clip from an article by our Dr. Waugh:

The writer does not believe in cold applications for pneumonia. Why? Well, because cold seems to be so frequently associated with the genesis of this malady. The temperature of the domestic chicken is higher than that of man. Pasteur tried in vain to inoculate chickens with the pneumococcus until he placed the birds in a refrigerator and cooled their internal heat down to a point below that normal for man, when the inoculations took effect promptly. This ex-

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Typhoid Fever:—Clean out the bowels and keep them cleaned, and the cause can not multiply fast enough to kill.—Cobb, *So. Clinic.*

plains why so many are seized with pneumonia immediately after being chilled. Cold may be employed to reduce fever when it threatens death or serious injury, but not as a direct remedy for the disease. On the contrary, there is reason for regarding a safe fever as salubrious, as limiting the spread of the malady through the lungs. A few years ago this was "heresy;" but I fancy our Philistines are not so positive as to the superiority of cold applications as they were.

This will allow of our excerpting from a response to a query for information regarding the use of ice in pneumonia, made by our office in the *Medical Brief*, in 1899 if memory serves rightly.

Doctor Shaw, long since deceased, one of the "Old School Physicians" who practised in Philadelphia, and Louisville, Kentucky, was very successful in treating "lung fever." He taught: "Treat the fever of pneumonia as you treat any other fever." The system was to be brought thoroughly under the influence of relaxing expectorants, preferably a decoction of lobelia. When relaxation occurred, and manifestation of perspiration supervened, when the patient reacted, as Dr. Shaw said, in a person of the proper temperament, cold in the chest was indicated, and in some patients to the entire body (the wet sheet). The indication for the use of cold to the chest externally, was the reaction following the administration of febrile and expectorant remedies, in patients of the proper temperament. Persons of the nervous temperament who bear pain badly, would contraindicate cold to the chest; but individuals of a phlegmatic temperament with dull, sluggish dispositions of the animal

economy, would be proper subjects for its application.

F. SILSBY TRIPP.

Pleasant Hill, Ky.



A PNEUMONIA REPORT.

I act upon the suggestion of a CLINIC reader to report our "pneumonia cases" from the busy field of action. The following are taken as an average:

CASE I.—January 12, 1905. Called to see Solly D., male, age 14. Pulse 112 per minute. Temperature 103° F. Expectorating prune juice sputum, streaked with blood. History of a chill three days earlier. Diagnosis: catarrhal pneumonia of the right lung. Jan. 13, pulse 116; temperature 102.4° F.; cough better. Jan. 14, pulse 100; temperature 101.4° F. Jan. 15, pulse 74; temperature normal. Jan. 16, pulse 76; temperature normal. Discharged.

CASE II.—Catarrhal pneumonia. Jan. 13. Dale D., brother of Case I. I rode two miles on a mule at zero weather to see him. Jan. 14, pulse 140; temperature 101.4° F. Jan. 15, pulse 104; temperature 101.6° F. Jan. 16, pulse 116; temperature 103.4° F. Jan. 17, pulse 133; temperature 104° F. Jan. 18, pulse 112; temperature 101.4° F. Jan., 19, pulse 80; temperature normal.

CASE III. — Catarrhal pneumonia. Lewis N., male, age 10. At 11 p. m., Jan. 17, he came from a warm room downstairs to see his father who had just arrived from a trip. Jan. 18 at 10 a. m. his pulse was 160; temperature 104° F. Jan. 19, 10 a. m., pulse 124; temperature 102.4° F. Jan. 20, 10 a. m., pulse 120; temperature 102° F. Jan. 21, 10 a. m., pulse 105; temperature 102.4°



The profession tends to the small dose frequently repeated till the therapeutic effect is obtained.—Bryce, *Southern Clinic*.

Ups and Downs of a Virginia Doctor; full of humor, pleasantry and sound philosophy, says Prof. Ashby. Price \$1.00.

F. Jan. 22, 10 a. m., pulse 110; temperature 101.8° F. Jan. 23, 10 a. m., pulse 100; temperature normal.

You will note that we have said nothing about respiration in these three cases. We have learned to pay our respects to the heart action and our aim is always to keep the pulse rate down to eighty beats per minute, or as low as possible; by that we mean below one hundred beats per minute. When using the trinity granule the strychnine takes care of the respiratory centers while the aconitine and digitalin reduce the pulse rate surely and safely. Numbers one and two are both weak, poorly nourished children, one sister having died from pulmonary tuberculosis, number two having had four pulmonary hemorrhages three years ago and in addition to his prune juice sputum on the 17th, or fourth day of his sickness, he expectorated blood all day, sometimes as much as a teaspoonful at a time. We gave the trinity (No. 1) one every fifteen minutes for four doses, one every half hour for four doses, one every hour for twelve doses, then one every two hours until January 19, when his pulse dropped to eighty per minute and his temperature to normal.

In number one the temperature and pulse were normal in five days' treatment; in number two the temperature and pulse were normal in six days' treatment; and in number three temperature and pulse were normal in six days' treatment.

In 1895 a mountaineer came to town and was taken sick. We were called and pronounced the disease pneumonia. We had just begun the study of active principles. Approaching the fellow with fear and trembling we prescribed defervescent

granules, one-sixth of one granule every two hours. His pulse ran the scale to 140; temperature 104° F. We laid aside the arms of precision and went back to our antipyretics. The fellow being robust and full-blooded, tugged along from April 18 to May 1, and finally passed the crisis. In spite of our medication he was sick fourteen days. Where has the crisis gone in the active-principle medication, when strictly adhered to?

Our treatment of cases one, two and three was trinity to effect; saline laxative every morning, intestinal antiseptic and calcium sulphide. Chest enveloped in cotton batten covered with cod liver-glycerin. The trinity granule is the one great combination of remedies in pneumonias of weak, debilitated patients. It surely tones up a weak heart, even in the presence of pneumonia. It would be sacrilegious to compare it to the great triune "Godhead," but where is the remedy discovered by mortal man that we may compare with this one? We have learned to approach the pneumonia patient with some assurance that we may be of benefit to him and in spite of the statement of the great Osler staring us in the face, that "Pneumonia is a self-limited disease."

We state most modestly that our loss from pneumonia in ten long years of hard country practice has been only two deaths. Well do we remember the first, when on March 9, 1896, a good old colored lady passed the crisis and then passed to the great beyond. The second fatal case was a young colored girl, seventeen years old—double pneumonia complicated with an abortion. She died February 26, 1902. We hope to live to



The Critic and Guide keeps "a hittin'" at the evil doers as it sees them; a heavy task.—*Southern Clinic.*

Give your prognosis on the best suppositions; treat your patient on the worst.—Clifford Albutt.

see the day when the death rate from uncomplicated pneumonia will be *nil*.

S. D. WETHERBY.

Middletown, Ky.

—:o:—

Results talk! Here is one doctor who is not a nihilist in the treatment of pneumonia. And there are thousands of others.—ED.



MORE PNEUMONIA TESTIMONY.

Once "ye editor" of the CLINIC wrote me that he always had a page for me when I chose to fill it, and that made me feel "wondrous kind" toward him and the CLINIC and "little acts of kindness" all along through the years have endeared the CLINIC and its makers to me, so when the editor asks us to report our cases of pneumonia I feel like acquiescing, but as I go along with my case I want to report on the other fellow's also; so please bear with me in patience and we will see what we get out of it.

Diagnosis: I knew when I saw it that it was lobar pneumonia. The case occurred in a little girl of thirteen who had had a chill twenty-four hours before I saw her. There was nausea and vomiting and muscular pains. When I first saw her she was expectorating a pretty tenacious mucus. Pulse was 120 and it rapidly rose to 150; temperature 102° F.; rusty sputum; respiration as high as fifty per minute. The pulse remained very high, 120 to 130, even after defervescence. On the morning of the fifth day the temperature was normal; pulse 120; respiration 40. The sixth day she was normal in every respect and convalescent—wonderful improvement. The treatment was: Calomel, aconitine, digitalin, veratrine. I changed to aconitine,



In the therapeutic use of glonoin one must be guided by the response of the individual patient.—Solis-Cohen.

strychnine and digitalin with intestinal antiseptics, and a little brandy—with no faith in the brandy.

Now, brethren, I want to discuss treatment at some length. I believe that many a disease is curable if we can only find the remedy, and it is our duty to search for these panaceas. That is my "creed," but "there are others" who do not subscribe to this "credo" among whom the chiefest are, first Osler, who says: "Pneumonia is a self-limited disease and runs its course uninfluenced in any way by medicine. It can neither be aborted nor cut short by any known means at our command. Even under the most favorable circumstances it will terminate absolutely and naturally, without a dose of medicine having been administered.—We have no specific for pneumonia.—Patients are more often damaged than helped by pneumonia drugging." "Ef I had the numony" I'd not send for Dr. Osler, nor anybody who believes like him, but "jes' get well"—or die—in the most inexpensive way possible.

Dr. Bartholow treats heroically or rather muchly, from bleeding up to the brandy point, to brandying down to the bleeding point. In cases accompanied by depression (page 395) he gives repeated doses of tr. aconite. We suppose that if a patient is depressed he depresses him more on the principle that "the hair of the dog is good for his bite." He avoids opium and morphine and blisters when a fellow is convalescent. He believes in calomel, in which he is probably correct.

The elder Flint called it pneumonitis and wrote of it entertainingly, and listen to the alkalometry there is in him: "The question whether the disease may be arrested (aborted) relates to the first stage." So say we all. A little further

Evil is the shadow thrown by the sunlight of good. Good is positive, absolute; evil negative, relative.—Woods Hutchinson.

on he says: Admitting that they (the abortive remedies) sometimes succeed." His faith is not very strong—in his abortive remedies, such as blood letting, cathartics, etc. No wonder! He believes in aconite, veratrum and opium, salines and so on, and, by the way, I believe that quite a proportion of his patients would recover without a dose of medicine being given (Osler's plan).

Dr. Roberts, an English physician and quite a systematic writer, gives opiates for the relief of pain, but is afraid of them. Quinine, expectorants, etc., he also uses, but repudiates the use of alcohol, except in low forms of the disease, where brandy should be used freely.

Loomis says that a large proportion of cases will recover without treatment, yet well-directed therapeutics will save lives, etc. Venesection is repudiated; "veratrum viride, aconite, antimony, calomel and all so-called heart sedatives add a new load to an already overburdened heart." He makes the full influence of opium his sheet anchor. Alcohol judiciously used is a most efficient means for combatting heart failure, but its indiscriminate use is more dangerous than indiscriminate bleeding.

More of the boys might be called to the witness stand but they are such a "disagreeable" set that we will let them "stand aside" for witnesses who have really found out what's the matter and how to manage it. Probably the first list of gentlemen are like the blind men's description of the elephant. Each spoke of the part he had hold of. They write from their own view point. To illustrate this we want to quote from the textbook of Alkaloidal Therapeutics (W-A): "Increase of blood in the pul-

monary capillaries means increase in their caliber, and this means that the vaso-constrictors are paretic and lack tone. As this state is not universal there must be too little in other parts of the circulatory system, hence the caliber of some of the vessels must be lessened and the vasoconstrictors must be in a spastic state. Now strychnine is the remedy for the first condition and aconitine and veratrine for the second. Together they will restore the equilibrium to the circulation. So one set of practitioners sought to control conditions one way and another set sought to control another way and each was right from his viewpoint. Why not do both things at once by giving both remedies at once?" We can and that is the way to do.

M. G. PRICE.

Mosheim, Tenn.



TO UNITE A WOUND WITHOUT PAIN OR ANESTHETICS.

To unite a wound without pain or anesthetics has been my study for many years. The horror of chloroform and the thought of stitching a wound are agonizing to the patient's relatives, to say the least, even before the surgeon arrives; and the fear is usually intensified upon his appearance. I have seen patients quickly turn pale as soon as I entered the room.

I have met a mother at the door who could scarcely talk from the effort to "swallow the heart," after which she would turn deathly pale and in a frozen voice say: "Doctor, will you have to use chloroform?" To be able to answer the question with the positive, "No, Madam," and to add that there will be no pain or suffering but a perfect union



The Gnostics explained the existence of evil by considering it inherent in matter, eternal, uncreated.

The shotgun prescription has no place in modern medicine; only 50 in 2,000 in Philadelphia contained six or more ingredients.—

without stitching has ever been my most acute desire.

When I see some members of the family pass around my back and quickly leave the room, the father nervous and the mother ice cold, I have often thought they must consider the surgeon, upon such an occasion, a most "horrid" man. To alleviate this dread I have worked out the following plan. And now I meet the mother's smiling face and the father's welcome and fairly "butt heads" with the whole family, who want to see the painless procedure go on without chloroform or any local or general anesthetic.

First, I use number 20 common spool cotton thread, well waxed, and a common blunt-pointed saddler's needle, and ordinary surgeon's adhesive plaster.

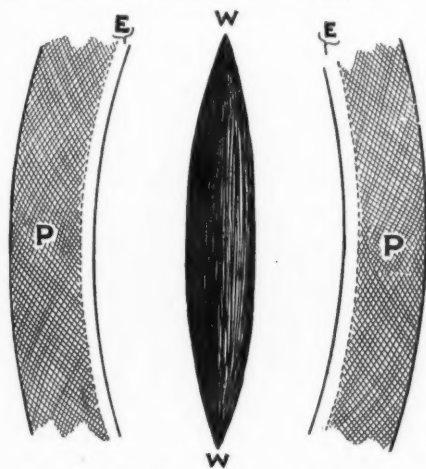


FIG. 1. Adhesive Plaster (P) applied on either side of the wound. (W.)

Applied ready to introduce the thread, you can see from the accompanying cut that the plaster is the same distance throughout from the retracted edge of the skin. The selvage edge of this plas-

ter is turned toward the wound on both sides.

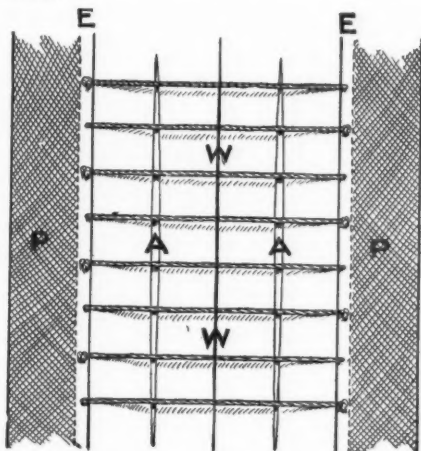


FIG. 2. Edges of wound approximated. Sutures pass through selvage (E) and elevated by toothpicks (A). Wound at W.

P. P. is the adhesive plaster. E. E. is the selvage edge upon which there is no adhesive plaster and through which the thread is passed. The black dots are where the knots are tied; they can be tied all on one side, but generally I tie first on one side and then on the other. W. W. is the wound after being closed. A. A. represents a toothpick slipped under the thread (on each side) for the splint.

Now with a small silver probe or another toothpick, work the skin to and from the wound under the splint until the skin is perfectly and gently coaptated, after which dust it with an aseptic powder (not antiseptic); aseptic talcum powder has served me best. Use no bandage, but throw a loose cloth over it and upon your return next day b'ow or fan away all the superfluous powder and leave it alone; in a very short time you

The more educated the physician, the greater his tendency to simple, instead of complex prescriptions.—Thrush, *Pharm. Era*.

Good and evil are names that signify our appetites and aversions.

—Hobbes.

will have a good union, often without a cicatrix.

I nearly always cleanse a wound with equal parts of listerine and distilled water and always before applying any dressing. Nothing should touch the wound except the dusting powder. The thread is raised off the wound by the splints which should be of sufficient thickness to press gently but firmly on the skin and rest about one-half inch from the wound. On the third day the splint would be turned half over, and turned from the wound; in the movement you press the skin toward the wound.

If your wound sags in the center it is because there is a cavity beneath the skin, that is, the deeper part of the wound is not coaptated. To prevent this we must have pressure by the adhesive strips sufficient to bring the wound up level, *not to pout*, but approximately in the condition before the wound was produced.

I use No. 8 thread for pressure, in cut No. 3, E. E.

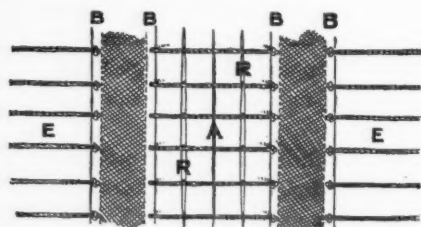


FIG. 3. To bring together deep parts by pressure sutures (E). Sutures elevated by pieces of rubber catheter (R).

A, wound after being closed. R. R., splint which is a piece of rubber catheter slipped under the thread. P. P., adhesive plaster; B. B., selvaige edges of the plaster. E. E., thread fastened to outer edges of the plaster and tightened for

pressure. If the wound is longitudinal upon a limb or trunk, go around; slip a little cloth or napkin under your thread and get the pressure necessary. If the wound is transversely across the limb make your adhesive strips longer and go around the limb with them, using broader adhesive plaster, and then approximate the skin as described above, with

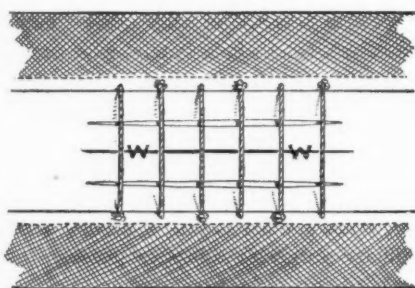


FIG. 4. Method of approximating deep parts when cut is transverse.

cloth under it, from A, around back to B, except possibly one inch or so on the opposite side to the wound, to hold it more stationary.

A lacerated, tortuous wound is easily united by the above method by using a flexible rubber splint, after you have your wound clean and aseptic, united with proper pressure, if any is needed, and have dusted it with aseptic powder. Now brush over the adhesive plaster with colodion and it will remain firm and non-flexible.

Of course there are wounds that this method will not apply to. By this method you cannot unite a lacerated perineum, a split ear or an incision through the abdominal wall. But all wounds that have a solid floor, that have been stitched

Pain is the great danger-signal of nature, the spark struck from the clash of the organism against its environment.—Hutchinson.

Pain, or the dread of it, has been and yet is, an extraordinary, a most powerful and constant stimulus to progress.—Hutchinson.

in the past, may be united in this manner to the entire satisfaction of both surgeon and patient.

To pass adhesive plaster across a wound is bad surgery, to say the least. It will not heal readily directly under the plaster and furthermore, you cannot so perfectly approximate the skin even between the strips. If the wound is oblique your own brain will teach you that other adhesive plaster must be added to get your pull in the right direction. The skin will heal more readily when exposed to the air than under any other circumstances because it is left in its natural sphere. When the air is excluded from the skin it is abnormal and the application is a foreign body and prevents healing of the skin. A dry, aseptic powder sprinkled upon the skin does not exclude the air but upon the second day all superfluous powder should be blown away and you have no stitch abscess and no stitches to remove on the fifth day.

W. J. CONLEY.

Coalgate, I. T.

—:o:—

There are some good hints here. While we agree, in the main, with Dr. Conley's method, there are, of course, some conditions under which its use would not be advisable. Whenever there is likely to be much muscular retraction, it will be necessary to bring the cut ends together with sutures. But for a horde of minor cuts, especially when they are on the face, the suggestions are admirable. By careful attention to secure perfect coaptation, scars are far less likely to be apparent than after stitching—as we know from personal experience. We should, however, advise a gauze protective to every

wound. This admits the air freely and prevents external infection.—Ed.



LOCOMOTOR ATAXIA—SOME CORRESPONDENCE.

Readers of the CLINIC will recall the excellent articles upon this subject which have appeared in our columns during the last few months, and the "meaty" comments of Dr. Ephraim Cutter especially. In this connection we are sure every one will be glad to read the personal correspondence which follows—which Dr. Cutter has kindly furnished:

Dear Dr. Cutter:

I have read your article in THE ALKALOIDAL CLINIC with considerable interest, inasmuch as I have had under my care for over two years a patient afflicted with locomotor ataxia.

It may be that you are right in thinking it caused by faulty nutrition, but the idea is a new one to me. Of course, we know that the lesion is, as you say, a thickening of the nerve-sheaths which pinches the nerves. Does this pinching for a long time destroy the vitality of the nerve cells? If it does, and so we are taught, then the removal of this thickening will not restore our patient to health. Lack of nutrition will cause a wasting of the particular tissue that is not nurtured by its proper elements, but why a thickening of fibrous tissue surrounding a portion of the spinal cord or other nerve tissues? I am not entirely convinced.

Let me tell you a little about my patient. He is about 42 years old; has been troubled with the disease about ten years; has been under all sorts of treatment, regular, homeopathic, osteopathic, and many quacks, who have fasted him almost to utter starvation, and exercised him by walking and running, eight to fifteen miles daily, all to no avail. He is growing gradually worse. When I met him—now nearly three years ago—his eyesight was nearly gone and he could not



If necessity be the mother of invention, then pain is the father of scientific discovery.
—Woods Hutchinson.

We do not desire things because we believe them good, but we hold them good because we instinctively desire them.—Pestalozzi.

walk without assistance. He was utterly discouraged and talked of suicide, as he had done everything that seemed to offer any chance of recovery, having taken barrels of iodide of potash and many other things, and the result is almost helplessness, leaving him a burden to himself and family, with no prospect of ever being any better.

I could not honestly give him any encouragement, but just at that time I received some circulars of the Roberts-Hawley lymph treatment and told him of it. The testimonials seemed convincing and he was persuaded to try it.

In my examination I found him very much emaciated, skin harsh and dry, pulse 112, temperature about normal; lightning pains frequent and painful almost beyond endurance; sphincters paralyzed—voided urine and feces involuntarily,—soles of feet without sensation, able to see objects passing in a good light. Was then on a treatment of a blood and nerve food, which he thought had done him some good. I started with five minims of the lymph compound hypodermically twice daily, gradually increasing the dose until fifteen minims were taken twice daily. His appetite soon began to improve and pains grew less; he became hopeful and cheerful, instead of morose and sullen. In three months the sphincters became normal and he was growing slick and fat. No improvement in eyesight. Areas of anesthesia grew less and coordination improved so he could walk fairly well by feeling his way. Improvement continued more slowly for about a year, when there seemed no further improvement. I resorted to electricity, cold baths, etc., but it did no good.

Today he has no pains, can move about the house by feeling his way. He is totally blind but has gone into business as a builder of elevators. (He is a civil engineer and was employed by an elevator concern before he became incapacitated by his illness.) His mind is clear and he can dictate all the minute details in the construction of elevators.

The healthy man doesn't know he has such a thing as a stomach; the dyspeptic doesn't know he has anything else.—Hutchinson.

Evidently the lymph treatment arrested the disease and benefited him very much, just how, whether from improved nutrition, removing some of the fibrous tissue or restoring vitality to some of the weakened nerve cells, no one perhaps will ever know. My idea is that the seat of the disease is in the medulla affecting the thalamus opticus which would give rise to all the symptoms manifested. How to remove it from there is a problem to which I have given much study and thought, but so far there seems to be no solution.

He has always been rather a heavy meat-eater; is of a nervous temperament and has had much worry and financial loss, to which I have attributed his disease. I may be wrong. For a few years he has had poor teeth, has been unable to masticate well, and has lived largely on whole wheat, corn-mush, fruit, etc. Meats also, but this he has had ground fine for him.

Now what do you think of my case? Will a lean beef diet help him any? I would be glad to have your opinion in regard to it and if I can be of any service to you I will be happy to serve you.

J. P. STRIEBY.

Swarthmore, Pa.

Dear Dr. Strieby:

Yours of the 23rd inst. received. Thanks for your interest and the interesting case you describe. As a tree is known by its fruits so does locomotor ataxia point to malnutrition.

The lesions you name: (a) thickening of the nerve sheaths; (b) pinching of the nerve by the endogenous thickening; (c) the weakening of the pinched cells; (d) the (as taught) destruction of the vitality of said nerve cells, are to my teacher and me all diseases of nutrition.

The first (a) compares with uterine fibroids some of which have been cured by nutrition treatment; (b) is self evident; (c) is due to the cutting off of vascular nutrition supplies; (d) if nerve cells are well fed it is hard to kill them.

Reward is reaped from the thorny barrens of discomfort by determined effort and not by tame and pulpy submission.—Hutchinson.

[We are not discussing mechanical pressure and traumatic cases.]

You say that removing this peripheral fibrous thickening does not restore our patient to health (didactic thought). As to said case I cannot say, as I have not tried to treat it, but I have had locomotor ataxia cases where the treatment that has removed it has restored them to health. Not in controversy, let me say as to your doubt concerning this restoration from the removal of said fibroid thickening, that metabolism is going on all over the body in life, that *natura naturans* is trying to heal all the time, that the removal of the sheath thickening acts as if said nerve was tied with a string and then untied, that if the pinched nerve was destroyed it would be likely to be necrosed, sphacelated; gangrenous as in senile gangrene from embolism, that when said nerve pressure is removed the circulation of blood, metabolism, osmosis, nerve currents, galvanism (may be) would be restored, and if the patient is properly fed nature will replace the injured nerve substances in the normal substance just as nature restored my thumb nail when I hit it a whack at the root. [An ecchymotic circle half an inch in diameter formed under the depression of the thumb nail. Of course this depression had an elevation of the proximal end of the nail. I was much interested to see how *natura naturans* has been gradually pushing forward depression and elevation, healing and leaving behind a nice smooth nail as if made by the finest workman. The depression has now got to the end of the nail bed. I wondered how the free edge of the nail would come out. It came out all right.]

Now *natura naturans* exercises the same care in healing in the deep tissues as in the superficial and will repair, unless the parts are dead and the means of repair (good nutrition) are not supplied. Indeed, nature does more wonderful repair work with nerves than with any other tissues. Who ever saw skin separated one inch in a wound, or of bone separated one inch, or of muscle sepa-

rated one inch, united by healing with sound skin, bone or muscle? And yet in the extirpation of the facial nerve for neuralgia it is said that often not enough of the nerve is removed to keep it from reforming. If one inch of nerve removed is the same as destroyed and yet nature reproduces it, why might not a portion of nerve destroyed by pressure of fibrous sheath be restored when said pressure was removed? One writer has said that the nervous system will remain intact and last longer in some wasting diseases than any other tissue of the body. If this is so, ought all subjects of locomotor ataxia be given up as incurable?

Another bond of locomotor ataxia with nutrition is, that if you would live solely on oatmeal and water or coffee or tea for two weeks, (taking the experience of those who have done this) you would have an acute locomotor ataxia. So of an exclusive diet of baked beans, water or coffee or tea for the same time. Drunkenness is an acute locomotor ataxia. Also your case, you said improved on lymph so that the sphincter ani muscles regained their normal power that was lost. Lymph is a food that affects nutrition.

As to his blindness—what are the ophthalmoscopic lesions? If there are none, I agree as to your idea that the thalamus opticus was at fault.

You ask will a broiled lean beef diet help him any? Answer: You do not state the condition of his urine and his blood. I have not seen a case of locomotor ataxia where the blood and urine were normal in morphology. If your case, like mine, has abnormal blood and urine, the said beef diet properly carried out will restore normal blood and urine, as a rule with some exceptions. This will help him by having the blood, glands and alimentary canal, with the abdominal viscera in good working order; by having leaks of force stopped; by furnishing a maximum of nutrition force with a minimum of expenditure of vital force in assimilation; by thus furnishing a



Our appetites, impulses and instincts are the exquisite fruits of myriads of ancestral generations.—Woods Hutchinson.

The grand old Greek "joy of living" comes back in broader, manlier, more enduring form.—Hutchinson, Gospel according to Darwin.

metabolism that will remove both normal and abnormal tissue and replace them with normal tissues.

It takes time. The patient needs urinoscopy two or three times a week, and hematoscopy less often, to see to it that both are kept normal. It is well also to study the morphology of the feces in order to know what is the state of the alimentary tract. This watch is because there is more devolution than evolution. If not then we could not be physicians.

All vital forces should be husbanded and *natura naturans* given the best chance to cure. The greatest physician could not cure all in Nazareth because of unbelief. Usually the natural history of the treatment teaches the patient the truth of the principles laid down.

EPHRAIM CUTTER.

West Falmouth, Mass.

—:o:—

Locomotor ataxia is a field that has not been studied as it deserves. We are not prepared to accept the dictum too often laid down that it is incurable, while we must admit that far too many cases continue to progress—uncured. Both of these letters contain abundant food for thought and offer bases for investigation. May we hope that others will take up this study and help toward the solution of the problem?—Ed.

~ ~ ~

LOCOMOTOR ATAXIA.

Have just read the articles on Locomotor Ataxia on pages 1053-1057 of October CLINIC, and fully sympathize with the sufferers. I have had beneficial results from the continued use of thiosinamin in cases with cicatricial tissue requiring absorption, and why would it not be of benefit in the sclerotic nerve tissue cases?

I would be pleased to have you get R. D., page 1056, to give thiosinamin a

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The glorious ecstasy of taking our lives between our teeth, and looking danger and death in the face.—Woods Hutchinson.

trial for a few months along with his lecithin. I have no cases on hand, so no chance to try it. Also would be glad to know the result of the trial if he decides to try it.

W. H. PHILIP.

Arthur, Ont.

—:o:—

We are glad to submit to the readers of the CLINIC this suggestion—that thiosinamin may be used in locomotor ataxia with a view to stimulating the absorption of cicatricial tissue.—Ed.

~ ~ ~

DRUGS AND THE KIDNEYS.

No more vital question comes before the practitioner today than the relation of therapeutic agents to the kidneys. Have we any diuretics? How do they act? What drugs irritate the kidneys? Should they be used in disease of these organs? The doses? What drugs ordinarily innocent become dangerous when the kidneys are diseased? These are a few of the questions that arise before the practitioner who has progressed through the stage of pure empiricism, and seeks to guide his steps by the light of knowledge.

Some of these problems were treated by Sollmann in a suggestive paper delivered to the section of Pharmacology at the Atlantic City meeting, and published in the *Association Journal*.

The kidneys must do their work, sick or well, if life is to continue. Does disease contraindicate irritation? To acknowledge this would be to exclude all stimulants from the materia medica. Even if it still further impaired the kidney tissue, the stimulation might be imperative. The true danger lies in the retention of toxic matters in the blood rather than directly in the injury to the

All is finite in the present; and even that finite is infinite in its velocity of flight towards death.—*De Quincey, Suspiria de Profundis.*

renal structures. We must often transgress the rule of resting an ailing organ because the necessity impels us to choose the lesser evil. Otherwise all diuretics are contraindicated.

Another aspect of the case is the danger from ordinarily harmless drugs when the renal tissues are seriously impaired. Potassium and digitalis become perilous agents then; a grain of calomel or an eighth of morphine may destroy life. Or, drugs harmless to healthy kidneys may irritate inflamed ones. When we seek the replies to these and many similar questions we are painfully impressed with the paucity of truly scientific information available. Even of our most used drugs the investigation has been but imperfect and partial.

That some drugs cause nephritis, and the lesions corresponding, we are fairly well informed. All the nephritis-inducing toxics cause the appearance in the urine of proteids, casts, renal epithelium and frequently leucocytes, sometimes blood, hemoglobin and its derivatives. The bulk of the urine is increased by small doses, decreased by large, and that is about all.

Richter and Roth showed that glomerular nephritis, caused by cantharidin, greatly reduces the bulk of the urine, restrains the diuresis of fluids, salines, caffeine and phloridzin, the molecular concentration of the blood increasing; while toxics acting on the tubular epithelium have less effect. Further experimental investigations are badly needed. The effects of therapeutic doses on metabolism, and on the excretion of the urinary elements, in health and in the various forms of nephritis, and the modifications of the disease processes induced, should be determined by such experiment and

not assumed *a priori*. The results of observations of animals should be corrected by clinical tests on man, in health and in each form of nephritis.

The work done already is small. Emerson showed that the administration of water or of diuretin in acute and chronic nephritis does not increase the percentage of proteid, but may lessen it; also showed the value of rest in bed, and a milk diet. Sollmann showed in a case of "physiologic" albuminuria that therapeutic doses of potassium acetate 11.7 grains, nitrate 4, caffeine 0.6, urea 2.1, tr. digitalis 1 cc., glonoin 0.0033 and 0.0039, strychnine 0.0065, and water, had no uniform effect. Potassium acetate in doses of 31 grains caused free diuresis and lessened the percentage of proteid but did not alter the daily output. Koevesi and Roth-Schulz state that water in health increases the flow of urine and lessens its molecular concentration; but not in either acute or chronic nephritis, the divergence being so much less in contracted kidney that they propose this as a diagnostic test. Sollmann also found that diseased kidneys can not secrete urine with a molecular concentration much higher than that of the blood, especially if the tubular epithelium is involved. Mohr and Dapper found that limiting the water ingested to 1½ liters a day reduced nephritic edema, the nitrogen and phosphate excretion being unchanged; but a closer restriction of water lessened the excretion as well as the edema. In chronic contracted kidney the reduction of water usually increases the albuminuria temporarily. Mohr and von Koziczkowski found that some nephritics retained the chlorides, others did not.

Castaigne and Rathery cite cases



Dosimetry imposes itself upon the physician as a duty, said Prof. Laura. Dosimetry should be made compulsory, said Burggraev.

By night with their spotted rain-clouds and lightning spears the Maruts rouse those whose ire is like the ire of serpents.—*Vedic Hymn*.

where the use of sodium chloride caused albuminuria, and others in which it followed their disuse. This pretty nearly comprises our information on these topics.

The renal structures are especially liable to injury by toxics ingested, as the tissues are exceedingly delicate and vulnerable, and the poisons are in excretion brought in contact with the renal cells while in concentration. A nephritic poison must be irritant, absorbable, and capable of injuring the kidney in doses too small to kill in other ways. The nephritis may be due to the breaking down of blood, etc., rather than to a direct action of the poison. Toxics that affect the tubular epithelium primarily and the stroma secondarily are, the metals, aloin, coal tars, alcohol, anesthetics, and oxalates. Those affecting the glomeruli first and the tubes only in large dose are cantharidin and arsenic. The essential oils are general irritants. Special conditions render irritant caffeine, neutral alkaline salts. Poisons destroying the blood and chronic poisons affect the kidneys secondarily, such as morphine and alcohol habitually taken.

All metals studied cause nephritis when absorbed in sufficient quantity, as has been observed with aluminum, antimony, arsenic, beryllium, bismuth, cadmium, cerium, chromium, cobalt, copper, lead, manganese, mercury, nickel, phosphorus, platinum, silver, tungsten, uranium and zinc. The anatomic and functional effects of all metals are alike. The tubular epithelium shows cloudy swelling, the nuclei disintegrate and the staining is impaired, and fatty degeneration may ensue. After excessive doses or long taking the connective shows round-cell infiltration, cirrhosis, etc.

Small doses increase the urine somewhat; large enough totally suppress it; albumin, blood, leucocytes, renal cells and casts are present.

Arsenic causes a specific paralysis of the capillaries, most pronounced in the glomeruli; the tubular epithelium is affected but not that of the straight tubes; albuminuria appeared within ten minutes after the hypodermic injection of 10 milligrams per kilo.

Phosphorus causes fatty degeneration in the kidney as elsewhere.

Langhans said that bismuth acted like cantharidin, small doses causing severe glomerular nephritis with little implication of the tubular epithelium; the stroma affected early.

Chromic acid salts cause pure tubular nephritis, confined to the convoluted tubes; the urine albuminous, scanty, containing many casts, even blood. Very small doses cause slight diuresis in rabbits (Ruschhaupt). Chronic poisoning ends in interstitial nephritis.

Though no reports are extant as to nephritis due to iron, Tyson warns against excessive doses in chronic cases.

Large doses of mercury cause occlusion of the renal tubules by lime. This metal causes the same effects as other metals. Jendrassik revived the use of calomel as a diuretic in cardiac dropsy, finding it increased the urine to 8 liters a day, the urea and chlorides greatly, when given in doses of 0.2—three grains—four or five times a day until ptialism began. It was not uniformly useful in ascites, not at all in serous effusions, uncertain in renal dropsies. In chronic parenchymatous nephritis with alarming decrease of urine Wood found calomel one of the most efficient of diuretics. Cohn said it caused ptialism with un-



The more acute a gonorrhea, the more essential is the injection of zinc chloride solution.—Jonathan Hutchinson.

The long-continued use of arsenic, external or internal, increases the tissue proclivity to all forms of new growth.—Hutchinson.

usual speed, and often increased the nephritis; but the weight of evidence is against this. Calomel in medicinal doses has never caused albuminuria in normal persons; but the effect on a preëxistent nephritis is not yet settled. The diuretic effect of calomel is due to the mercury, probably a secondary result of the stimulation of the absorbents. But Cohnstein showed that when calomel in hyposulphite solution was injected hypodermically moderate diuresis occurred, but not if the animals had been profoundly chloralized. He concluded that the diuresis was due to vasomotor action originating in the medulla. Vejux-Tyrodé and Nelson attributed this result to the hyposulphite. They used the caseinate of mercury, and found a slight diuresis occurred but only occasionally from intravenous injections, more frequently from subcutaneous use; and deep anesthesia did not affect the results. They concluded that the mechanism of the calomel action was as yet inexplicable.

Probably all coal tars cause nephritis. Small doses cause diuresis with no albuminuria; excessive doses cause the latter. The urine then becomes scanty, with casts, blood, hemoglobin, or methemoglobin. The tubular epithelium degenerates. In chronic poisoning interstitial change occurs.

All volatile oils irritate the dialysing membrane, causing pelvic hyperemia. All are for this reason diuretic; larger doses causing scanty albuminous urine. The ecboic oils also cause hemorrhage. Digitalis, strophanthus and squill in ordinary doses cause diuresis, more marked in heart diseases; the principal effect being an increase of chlorides and water (LeNoir and Camus); the effect commencing on the day after the drug

is begun and persisting some time. Overdoses cause albuminuria and hematuria. Glomerular irritation has been charged but not proved. The effects are mainly due to circulatory changes, the diuresis to the increased tension in the renal vessels, and the absorption of effused serum; the oliguria from overdoses to too great contraction of the vessels. Ordinary doses have not been proved irritant in nephritis.

Cantharidin is a most powerful and selective renal irritant. Even moderate cantharidin nephritis prevents the compensation of a single kidney, lessens excretion of organic metabolites, raises the molecular concentration of the blood (Richter and Roth). It completely prevents caffeine and phloridzin diuresis (Hellin and Spiro). It is always contraindicated in renal disease. Small doses enormously dilate the glomeruli, leucocytes multiply in Bowman's capsule, the urine shows albumin half an hour after a hypodermic; minute doses increase the urine, larger doses lessen it; the tubular epithelium is affected only by large doses and as a late symptom; there is no interstitial change in acute forms, very little in subacute poisoning.

Aloin, Cushny says, does not irritate the kidneys; but in rabbits Muerse found degeneration of the tubular epithelium. The urine is increased or diminished, and contains proteids, leucocytes, casts, crystals and blood.

Phloridzin is used as a diagnostic test of renal sufficiency. The quantity of sugar eliminated after injection of phloridzin, the time the sugar first appears and the period during which it is discharged, may be taken to indicate the number and activity of the renal epithelial cells present (Croftan). Besides in-



Certain other mineral drugs may share with arsenic as tending to increase the liability to cancer.—Jonathan Hutchinson.

Extracts of the infundibular part of the pituitary cause rapid, strong contraction of the ventricles.—Herring.

ducing glycosuria phloridzin is diuretic. Nothing is known as to its action in nephritics.

Santonin and male fern cause parenchymatous nephritis; the former hematuria.

Data regarding the cathartics is scanty and inconclusive. The resins sometimes cause nephritis; of emodin drugs—rhubarb, senna, cascara—even of croton oil there are no reports.

Alcohol rarely causes acute albuminuria in normal persons; moderate doses are injurious to nephritics; fatty degeneration of the kidney is caused by chronic alcoholism.

Overdoses of chloroform or ether cause acute parenchymatous nephritis; even small doses are bad for preëxistent nephritis; scientific investigation is still wanting. Chronic chloroform use produces lesions similar to those of alcohol. Other anesthetics, with chloral, urethane, hedonal, are supposed to act similarly. Sulfonal especially causes nephritis with epithelial necrosis. Iodoform causes albuminuria and hematuria, even when applied locally.

Urotropin also changes the tubular epithelium, the urine containing serum proteids and blood cells. Probably formaldehyde does the same.

Most alkaloids are too slightly irritant and used in too small doses to irritate the kidneys. Drug-habit albuminurias come late as secondary phenomena. Veratrine might be suspected but there are no data. Large doses of quinine have been followed by hematuria and persistent albuminuria. A dose of four grains was followed by hematuria (Vaughn).

The caffeine group stimulate the renal parenchyma without irritating it, the

action being exerted on the convoluted tubes and not on the circulation. Pouchet and Chevalier affirm that theocin in large doses injures the epithelium of the convoluted tubes and the parenchyma but this has not been confirmed. Caffeine increases the water and the solids, especially the urea; the percentage of albumin is not increased; it is indicated to raise deficient excretion in nephritis, but does not act if the tubular epithelium is greatly impaired, or if administered continuously.

Sodium and potassium chloride and acetate, glucose and urea, cause diuresis, increasing absolutely the metabolites and salts while lessening their concentration in the urine. Free water-drinking exerts similar action. This effect is probably due to the dilution of the blood; its increased bulk changed molecular concentration and the different resorbabilities of the various ions. Vital stimulation plays a subordinate role, and irritation does not occur. The claim that deprivation of chlorides causes disappearance of nephritis edema requires further study. It may lead indirectly to the absorption of effusions that can not exist without salt. But the salt may have an irritant effect. These diuretics may be extremely useful by removing metabolic poisons. Toxics like lithium and potassium should not be given in nephritis, so the choice is limited to sodium chloride and acetate.

Among ions having specific actions are: nitrates, supposed to be diuretic from irritation, without sufficient proof; the acids are positively deleterious, causing albuminuria and hematuria; chlorates, strongly irritant, the urine showing casts, hemoglobin and methemoglobin; oxalates, which form insoluble crystals that block up the cortical tubes,



Pituitary extracts stimulate the vasoconstrictors, contracting peripheral arterioles; antagonized by apocodeine.—Herring.

Hay Fever:—Fulton sprays the nares with quinine sulphate saturated solution and applies to 1-to-16 vaselin ointment.

directly irritate the epithelium, cause vacuolar degeneration of the convoluted tubes, the urine lessening and showing a little proteid, renal epithelium and casts, with the crystals, nephritis after very large doses; fluorides which have been too little studied. MacCallum showed that the injection of calcium salts interfered with the secretion of urine, but it is doubtful if this ion can be sufficiently absorbed from the alimentary canal to do this.

The foregoing is a concentration of this admirable paper, which might with advantage be pasted into the work on Therapeutics to which each physician refers in his daily practice. A good beginning.

W. F. WAUGH.

Chicago, Ill.



A SKINNED SHIN AND A MALARIAL MELANGE.

I have been reading the W-A Alkaloidal Therapeutics with the same lively interest that I would feel in the most interesting novel, and find little time and less inclination to lay it down to eat. I feel now "well armed" with this, Shaller's Guide, and the Digest. My armamentarium of "specifics" in granules has grown from the 9-vial case to two 9-vial cases; then there was an addition of a 24-vial case and now I need another 24-vial case, or a "double 24."

I "skinned my shin" over an old sore that healed after a long time when much younger than now, and as a result the abrasion in the old scar has left me with a case of erysipelas of the vilest sort, putting me *hors de combat* for two weeks, and I write you now with the writing material in my lap. Now if you have any specifics, here is the place for

you to make your "nine stroke." You have heard of "a friend in need." "I'm he;" if you will be "the other man," come on with your rat killing!

Doctor, in fifty years' experience in the malarial, dirty Yazoo Delta, along the "river of Death," where, before the negro plantations were devastated, each year necessitated the buying of fifty to one hundred negroes for plantation work (like buying so many head of mules), I have noted much written about the malarial fevers of the South; written by many that never saw a case of pernicious fever. Allow me to put a bug in your ear; the same fever bug that makes hematuria, also makes pernicious fever. We have congestion of the brain, the stomach, lungs, bowels; why not of the kidneys? Also hemorrhages from all these organs; why not hemorrhages from the kidneys? Now, in my experience, covering quite fifty years in the Delta, where we knew nothing of hematuria and treated all cases as congestion or pernicious fever or congestive chills, we lost none except when we neglected or failed to get in the *quantum suff.* of quinine and calomel—the main and sheet anchors. When we got to treating more scientifically we simply spoiled all. My graveyard is less than any doctor that has practised here for ten years, and I will pit the whole forty years here against them.

Now we have three types of hematuria, an intermittent, a remittent and a continued and usually fatal. The intermittent is seldom fatal, except in neglected cases. The old proverb says: "Three congestive chills would kill the devil or any other man," but sometimes they don't. The continued cases seldom recover, suppression of urine, as in yellow fever, supervening. I consider it a



Of 2,000 Philadelphia prescriptions 232 had but a single ingredient; and 27 had incompatibilities.—Thrush, *Pharm. Era*.

Galbraith (*J. A. M. A.*) reports fifty consecutive pneumonias without a death; treated by quinine and iron.

highland fever; opiates are contraindicated under all circumstances.

Now I have seen this same disease without hemorrhage, the same identical paroxysms and exacerbations with dark-greenish urine passing through the kidneys and black tarry actions from the bowels and the deep bronze skin of Addison's disease; chamber almost filled, showed bile plainly and in profusion. My theory is that the acrid bile passing through the kidneys and ureters and the general congestion cause the hemorrhage and not a specific disease; merely an aggravated symptom. And the same microbe I mention will be found in pernicious or malignant bilious fever. May I ask you, Dr. Waugh, and your whole congress of doctors and the alkaloidal family, the triple questions:

"Is hematuria (so-called malarial) a disease *sui generis*, or, is it a symptom of the malignant, bilious or pernicious fever prevalent in our Delta—with all the types of this class, intermittent, remittent and continued?

In fifty years' practice I have seen no oxytotic property of quinine. I have seen almost fatal collapse from over doses and do consider 40 to 60 grains dangerous if not poisonous. I have suffered severe prostration (almost collapse) from 2 to 5-grain doses at intervals of three hours while I give and take 2 grains every two hours almost *ad lib.* and seldom go beyond 3 grains every three hours. Arsenic and strychnine are good medicines in appropriate doses and too much water will drown an elephant. I use also atropine alone to allay premature labors or abortions (hypodermically, 1-1000 grain) and seldom or never use morphine excepting in surgical cases,

gunshot or other wounds, then by the mouth or hypodermically.

This is not written to teach, it is simply an experience of fifty years in the jungles where the fight has been to dodge death, and I have outlived my ancestry and all the doctors that have ever lived in this section, and am now about the only one left to tell the tale.

CHAS. C. THORNTON.

Thornton, Miss.

—:o:—

For erysipelas: Clear the bowels with a sufficiency of saline; but begin at once taking two granules of pilocarpine every quarter-hour till sweating commences, and then often enough to keep up slight action; but on no account let up its influence as long as a trace of the erysipelas remains visible. You can apply a watery solution of phenol to the skin also, with benefit. But do not neglect the pilocarpine. This applies only to the sthenic forms; the asthenic requires tincture of iron in full doses, 30 drops every two hours, with richly nutritious and easily digested food pushed to the limit of digestive capacity. Follow with the best of our tonics, berberine to tone the connective, iron for the blood, strychnine for the vitality, possibly a little phosphide of zinc would be of striking benefit in a man of that age—say, gr. 1-6 four times a day for a week.

Hematuria is due to the malaria pure and simple. The injury to the blood may be so great that when quinine is given it destroys the vitality of more of the weakened protoplasm, and the hematuria is increased. Quinine has been used with success as a preventive of hematuria but the weight of evidence is against it as a remedy for that symptom. Strychnine in



With suicides in little Milwaukee one a day, and half of them from carbolic acid, the city got after careless druggists who forgot law.

Specialism has benefited the general practitioner by educating the public to getting accustomed to higher fees.—*South. Medicine.*

full doses has far more evidence in its favor.

Why do we give pilocarpine for erysipelas? Because that drug has been found to combat in a remarkable manner the invasions of the body by streptococci; how, we do not yet know, unless it is by enormously stimulating leucocytosis, which pilocarpine does. But in asthenic states there seems to be no reserve power of the body to call upon for such a purpose, and pilocarpine depresses the vitality without quelling the disease; hence as experience has taught us that the iron powerfully increases the vitality, and controls the disease, we give it. The elder Gross held that there was a peculiar vital stimulation caused by this chalybeate that no other possessed. But why not then give it in sthenic forms also? Because it does harm and not good. The writer has seen cases thus treated; every dose induced delirium, and great benefit resulted when the iron was stopped and aconitine substituted. This moderated the fever, but did not act as directly against the malady as does pilocarpine.

—Ed.



A FEW WORDS BUT THOSE TO THE POINT.

Without the granules and other preparations I could not treat patients conscientiously. It has reached the point where I would feel guilty of homicide should I lose the life of a patient without treating him with alkaloids. Where a doctor has once used these he can no longer allege ignorance as an excuse.

D. ALLEN.

Coalgate, Ind. Ter.

—:O:—

It goes without saying that the doctor has expressed our views. If a man uses



A mixture of glycerin, water and tragacanth, with one part to 500 of mercury oxycyanate is an ideal antiseptic lubricant for sounds, etc.

an uncertain, inferior tool to do work when he knows that he can get a perfect one he cannot be termed a good workman—and it is quite certain that the work he turns out will be poor. When the material is the human body and the work means *life* or *death* surely the true physician will take no risk and use only the most effective remedies obtainable.

—Ed.



A WORD FROM DR. PODSTATÁ.

In the December number of THE ALKALOIDAL CLINIC you are giving publication to a lot of nonsense which was made public by one of the Chicago papers. I was quoted there as having said that one person in every one hundred and fifty in Chicago is insane. I have never made that statement and believe it absolutely false and absurd.

I have written to the editor of the paper that first published the story and asked to have the statement corrected. It was never done, however, so far as I am able to find out.

In my recent investigation on the subject of the frequency of insanity I have found that the proportion in Cook County is about one to every four hundred or four hundred and fifty of the population. In other counties of the state I have found it to be about one to every five hundred of the population. Why my statement was distorted I am unable to explain. I should not be blamed, however, for everything I am credited with in the daily press. If the doctor that finds fault with me will kindly wait until I make such a statement in a medical publication, he will be better justified in his condemnation.

V. H. PODSTATÁ.

The tsetse disease of horses, well known by all readers of South African travels, is curable by injections of sodium arsenate.

We are very glad to give publicity to Dr. Podstata's letter. This disavowal of the absurd statement which was credited to him by the newspapers settles the matter for good and all, we hope.—Ed.



CAN BLOOD BE USED BY A CHRISTIAN AS A REMEDY?

The prohibition of blood as an article of food is of ante-Mosaic date, for Moses relates that the prohibition was given to Noah. We read in Genesis 9:3, 4, 5, translated directly from the original Hebrew thus: (3) "Every moving animal which is alive shall become yours for food, like the green grass I have given to you, all of it; (4) but flesh with its life, its blood, ye shall not eat it, (5) and your blood for your life shall I demand, from the hand of every living being I shall demand it. And from the hand of the Adamite, from the hand of man his brother will I demand the life of the Adamite." It is evident from this, that it was not blood, as such, that is here forbidden, but only when that blood is in the living flesh. It is directed against the cruel habit, yet prevalent among gourmands, of cutting a slice of flesh from a living animal and eating it, English fashion, half raw. A moment's reflection must suffice to see that flesh cannot be drenched of all blood, even when the animal's life blood is shed by cutting its throat or piercing its heart; some of it will remain in the muscles.

This pre-Mosaic, anti-blood-eating custom was adopted as a national Israelitic rite, for the double purpose of preventing the drinking of blood as a prevalent Asiatic rite at idol worship and at taking of an oath, and of adopting the

libation of blood on the altar of Jehovah as a propitiation for sin. We meet with this first in Leviticus, 17. The Hebrew word there used for "kill" (v. 3) is one that is prevalently used for prostrating an animal by the shedding of its blood, and is etymologically related to our word "slaughter," and the German "schlachten."

In that chapter we read in verses 13, 14: (13) "And if any man of the children of Israel, or of the foreigner who sojourns in their midst, take a catch of beast or fowl that may be eaten, then shall he spill its blood and he shall cover it (viz., the blood) with dust; (14) for the life of every flesh its blood is with its life. And I said to the children of Israel, Blood of any flesh ye shall not eat, for the life of any flesh is its blood; all that eat it shall be cut off." Here, too, it will be noticed that the prohibition refers to eating living flesh with the living blood in it. It is eating and not drinking that is constantly spoken of because reference is had to flesh.

In the same section we read, Chapter 18:5, "And ye shall keep these my statutes and judgments the which an Adamite shall do and live by them. I am Jehovah!" Is it not plain from this that the prohibitive statute of blood was for life and not against life? How can any one have applied it sensibly against the use of blood as a means of saving life and health?

Again, Leviticus 19:26, we read: "Ye shall not eat by the blood, ye shall not practice enchantment nor divination." These practices were intimately connected with idolatry, and it is just against this that the antiblood statute was evidently directed.



In the *Medical Record*, Jan. 21, Wakefield combats the idea that the mosquito is the sole means of imparting malaria.

Colchicine causes degeneration of leucocytes, which swell, extrude the granules, the nuclei becoming indistinct.—W. S. Dixon.

Again, Deuteronomy 12:23: "Only be firm not to eat the blood, for the blood it is the life and thou shalt not eat the life with the flesh." It is again eating and not drinking, for the prohibition is against living flesh.

That this prohibition was strictly observed early one can see from the incident recorded in Samuel 14:32-35, and from the deprecation in Ezekiel, 33:25. That this went on to the times of the Christ, goes without saying, and the incident of the first Christian council at Jerusalem recorded in Acts 15:20-29, is evidence of it. And here, too, it is not from blood, as blood, that the Gentile Christians were enjoined, but from its connection with flesh, as we see it especially in the prohibition of strangled flesh. It is straining a point far beyond the legitimate intention of the prohibitive statute to apply it against the use of blood as a proper remedy. Jehovah's commands are for the preservation of life and health and not against them.

It would be interesting to know whether those who take the extreme view against administering blood as a remedy *per os*, would also be against transfusion.

E. M. EPSTEIN.

Chicago, Ill.

—:o:—

Now and then somebody bobs up with a criticism from a Biblical standpoint on the use of blood as a therapeutic agent. Deciding to go on record as to our position in the matter, we referred the question to our confrere, Dr. Epstein, who, as is well known to CLINIC readers, is deep in the lore of real things, getting his knowledge from the languages that are the prime source of our modernized literature; and the good doctor replies as above. We should judge this to be suf-

ficient for anyone. A little knowledge coupled with bigotry and more or less innate stupidity is a poor thing to have.—Ed.



SUCCESS IN ASTHMA.

On page 966, September CLINIC, under the head of "Scored a Triumph," Dr. S. A., of Wyoming, writes that he relieved a case of asthma by the use of hyoscyamine, strychnine arsenate and glonoin. I wish to say that this testimonial is all right. I used the same treatment on a young man twenty-six years of age, who has had asthma of the worst kind since fifteen years of age and has been unable to find anything that would shorten his attacks or give him any relief whatever.

After reading "Scored a Triumph" I decided to try the treatment in his case as soon as an opportunity offered. Last evening he came into my office and it was unnecessary to inquire as to the nature of his trouble, as you could hear him wheeze a block. I gave him the hyoscyamine, strychnine arsenate and glonoin and instructed him how to take it. At the end of one hour he was getting considerable relief and at the end of two hours he was practically free from the attack and this morning he was able to resume his work.

I also wish to state that if at any time this treatment fails, you can get relief in an hour by the use of 1-20 grain of apomorphine administered hypodermatically. The only drawback to this treatment is the nausea and vomiting.

I get more help from the pages of the CLINIC than from any medical journal I take.

F. B. MAY.

Hummell, Kan.



Adrenalin constricts the peripheral vessels and stimulates the heart, but could not be shown to constrict lung vessels.—Dixon.

A correspondent asks for information regarding Biff's Method of Determining the Coagulability of the Blood.—Ask Jim Jeffries.

Isn't it surprising what decided results one gets from the alkaloids? And isn't the idea simplicity itself when you "catch on"?—Ed.



POISONS AND ANTIDOTES.

General Treatment.—Eliminate if possible by emetics, as zinc sulphate, 10 to 30 grains, copper sulphate, 2 to 5 grains; a hypodermic of apomorphine, 1-30 to 1-8 grain. Use a stomach pump when vomiting cannot be produced, observing great care if irritant poison has caused injury to tissues. In cardiac syncope give stimulants. In narcosis of brain, keep the patient awake. In threatened paralysis of respiratory movements, alternate hot and cold spray to chest, slapping, artificial respiration, forcible dilation of sphincter ani; give atropine to excite pneumogastric nerve. Tannic acid is an antidote for all alkaloids; where you have not tannic acid use strong tea, then use stomach pump.

Acetanilid, Antipyrin.—Emetic, recumbent position, rest, stimulants by stomach or injection. Artificial respiration, atropine, 1-60 grain, strychnine, 1-30 grain. Transfuse blood.

Acids, mineral, sulphuric, nitric, muriatic.—Give an alkaline solution of magnesia, carbonate of sodium (plaster off wall in emergency), emollient drinks, fixed oils, rest, stimulants if necessary. Feed by enema.

Acid, oxalic.—Lime in any form; avoid sodium and potassium salts; emetics or stomach pump.

Acid, hydrocyanic or prussic.—Emetics, dilute ammonia water by inhalation and intravenously in vein of leg, chlorine water, fresh air, artificial respiration

with cold effusion. Stimulate—atropine, 1-50 grain.

Acid, carbolic.—Alcohol 2 to 6 ounces. Any soluble sulphate, dilute sulphuric acid, glycerin and oil, magnesia, Epsom salt; vomit. Eggs and milk, stimulants.

Alkalis, hartshorn, soda, potash, lye.—Vinegar, citric acid, lemon juice; emetics, bland liquids; secure rest, opiates for pain, fixed oils, stimulants if necessary. Rectal feeding.

Alcohol.—Ammonium chloride, gr. 20 every hour, inhalation of ammonia, cold to head, purgative, strychnine, capsicum in hot milk.

Arsenic (Paris green, Fowler's solution, Scheele's green).—Vomit; hydrated oxide of iron, or dialyzed iron. Add magnesia to any iron solution; white of eggs, milk, castor oil. Atropine; apomorphine.

Acetate of lead.—Epsom salt, dilute sulphuric acid, magnesia, soda, succeeded by emetics, and afterwards by opium and milk; castor oil.

Ammonia.—Vinegar, lemon juice, demulcent drinks.

Aconite or Aconitine.—Emetics, stimulants, external and internal, strychnine and atropine; keep up external heat; keep patient flat on back. Tannic acid.

Antimony (Tartar emetic).—Vegetable acids, such as tannic acid, catechu; stomach pump. Strychnine. Eggs and milk.

Belladonna, atropine, stramonium.—Emetics, pilocarpine hypodermatically, mustard flour in water, cold to head, strong hot coffee, ammonia external and internal, enema.

Bee Stings.—Soda or echinacea locally.

Baryta Salts.—Emetics, or stomach pump. Epsom salt.

Cantharides.—Emetics, emollient



Medical Notes and Queries, edited by H. W. Cattell, Philadelphia, appears first in January. 16 pages, dollar a year; neat and good.

The gem of *Medical Notes and Queries*, and it is one, is Watson's skit on Oleo. The humor is rich—not oleaginous.

drinks, opiates by mouth and rectum, large draughts of water to flush kidneys.

Chlorine Water.—White of eggs, milk, flour, very dilute ammonia water.

Cannabis Indica.—Hot brandy and water, vegetable acids (lemon juice, vinegar), blister to nape of neck. Let patient sleep.

Copper Sulphate.—Yellow prussiate of potash, or soap, white of eggs, milk, magnesia. Emetic, flour.

Chloroform.—If swallowed, use stomach pump. Fresh air, artificial respiration, lower head, pull tongue forward. Brandy and ammonia intravenously in leg. Dilate sphincter ani. Use hot whisky enema. Atropine and strychnine. Amyl nitrite inhalation. Apomorphine.

Chloral. — Emetic, apomorphine; strychnine, coffee, atropine. Artificial respiration, heat.

Cocaine. — Brandy, nitrite amyl inhalations. Ether, five minims hypodermatically. Tannic acid, artificial respiration.

Colchicum, colchicine.—Emetics, followed by demulcent drinks. If coma be present give brandy, ammonia, coffee. Keep up external heat. Opium in large doses.

Conium, Cicutine.—Emetics, followed by stimulants, external and internal. Tannic acid.

Corrosive Sublimate, Mercury, Gold.—White of eggs, milk, flour, equal parts lime water and milk. Vomit or use stomach pump, castor oil, strong tea. If chronic, iodides and astringent mouth washes.

Croton Oil.—Emetics, copper sulphate, 10 grains; wash out stomach followed by mucilaginous fluids containing opium.

Canned Fish.—Emetics, purgative, pilocarpine.

Decayed Meat or Vegetables.—Emetics or stomach pump, purgative, enema, powdered charcoal, hydrogen peroxide, pilocarpine. Atropine or muscarine as indicated.

Digitalis, digitalin.—Head low, recumbent position; after emetics, stimulants, strong coffee, mustard to chest.

Elaterium.—Demulcent drinks, enemata of opium; warm bath, external heat.

Ergot.—Emetics, strong tea, or tannic acid, nitroglycerin, stimulants, ether.

Gas, illuminating, cesspool, etc.—Fresh air, oxygen, artificial respiration, amyl nitrite. Dilute ammonia hypodermatically, nitroglycerin. Electricity to heart and lungs; transfusion of blood. Pulling tongue forward 16 to 18 times per minute.

Gas, nitric, nitrous, sulphuric, hydrochloric; or Ammonia, chlorine, bromine; inhalations of above or of flames.—Opiates, steam inhalations, counterirritants to chest, chloroform vapor.

Hyoscyamus, hyoscyamine.—Stomach pump or emetics, stimulants, external and internal. Pilocarpine.

Iodine. — Emetics and demulcent drinks, starch or flour diffused in water. External heat, opium if necessary for pain, use in starch enemata or give in small doses.

Lobelia.—Stimulants external and internal; external heat. Ammonia, tannic acid.

Mushrooms.—Emetics, atropine, castor oil, stimulants, camphor, coffee.

Nux vomica, strychnine, brucine, ignatia.—Vomit, catheterize unless it produces convulsions. Twenty grains chloral, 60 grains bromide of potash; nitrite of amyl, chloroform to control con-



The proposed amendment to the Virginia pharmacy law seems to prohibit physicians dispensing their medicines.

Can and must the physician issue to himself a written order for drugs, previous to dispensing them himself, in Virginia?

vulsions. Secure absolute quiet. Tannic acid. Ice to spine.

Opium, morphine, laudanum, paregoric, etc.—Atropine hypodermatically till respirations number eight per minute. Stomach tube, stimulants external and internal, brandy, strong coffee; cold effusion; ammonia to nostrils; galvanic shocks, artificial respiration, electric brush. Wash out stomach with potassium permanganate solution. Keep patient awake, but do not tire too much.

Phosphorus (matches).—Magnesia, old oil of turpentine gtt. 40. Emetic and purgatives, sodium bicarbonate, peroxide of hydrogen, 1 per cent solution of potassium permanganate.

Physostigma.—Atropine, external heat, cardiac and respiratory stimulants.

Silver Nitrate.—Solution of common salt and demulcent drinks. Eggs, white of. Emetics.

Snake Bite.—Inject solution permanganate of potassium or ammonia at seat of poison; olive oil freely, internal and external. Stimulants.

Tobacco.—Emetic, stimulants, external and internal, strychnine, external heat, coffee.

Veratrum Viride.—Camphor, ammonia, atropine, hot coffee or caffeine up to gr. 20 hypodermatically.

Wood Alcohol.—Emetics, afterwards stimulants.

Zinc Salts.—Carbonate of soda, emetics, warm demulcent drinks, stimulants.

W. W. HANNIS.

Greeley, Colo.

—:o:—

Of course the best place to carry a list of the poisons and their antidotes is in your head—but that is sometimes rather difficult. The next best thing is to have a list close at hand in time of emergency.

The mortality in Johns Hopkins Hospital in pneumonia cases is 25 per cent for white and 30 per cent for colored patients.—C. M. J.

Many of the handy little volumes now prepared for the physician's use have these, but in default of such a volume, paste this list or some other similar one "in your hat," or any other handy place. And by the way, what can you add to this, which the doctor has prepared with so much care?—Ed.

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TO MAKE A GOOD "HAIR SUTURE" USE THREAD.

Allow me to add to Dr. Candler's article on using hair as a suture. My experience is that inevitable failure follows an attempt to tie the hair of the human head into knots, because they very quickly come open again. If, however, you will lay a sterile thread (any material) next to the skin, then pull your hair suture tight, clamp it with an artery forceps while it is being held taut, finish your knot, and then tie your knot of thread around the hair knot, then it will hold. In other words, the hair knot, which is made by the assistance of an artery forceps, is itself held by a knot of thread which envelopes it.

Please give us your infallible remedy for bedwetting, which you suggest or promise on page 34, Query 4506.

A. F. BURKARD.

Omaha, Neb.

—:o:—

We have found it easy to tie the hair of the head as suggested in the article by using the surgeon's knot. We have, occasionally, had trouble when the hair is slippery and wet, but a drop of colodion settles that matter. However, your suggestion is an excellent one, Doctor, and we take pleasure in reproducing it..

The remedy for bed-wetting spoken

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In chronic myocarditis, dyspnea, foot dropsy, no valvular disease, low arterial pressure, digitalis worse, glonoin aids.—Greene.

of is the following: Ergotin, one granule, strychnine, gr. 1-134, hyoscyamine, gr. 1-500, and either gr. 1-6 of hydrastin or three minims of specific tincture of thuja every three hours, the last dose being given one hour before bedtime and no fluid being allowed after six o'clock in the evening. Of course, any abnormalities of sphincter or prepuce must be corrected and worms must be gotten rid of if present.—ED.



GONORRHEAL RHEUMATISM.

I would like to report a case of gonorrhea to the CLINIC family and get opinions, editorial or from the readers, as to the class of cases this one represents.

He was a boy of twenty years who had seen much of the world; slender and wiry, rather "tough," but pleasant appearing. His "clap" was raging; the glands were angry and bleeding, the foreskin swollen and beneath it a mass of putrid smegma was eating into the tissues about the glands. Both eyes were red and injected; there was photophobia and a watery but not a purulent secretion was discharging from the lids, which were not swollen, although the palpebral and ocular conjunctivæ were both deeply injected. There was no orchitis nor joint symptoms at this time.

He came to my office for treatment without money, but stated that the landlord of the hotel where he worked would stand good. I knew this landlord as a man altogether too generous for his own good, and chancing my pay I prescribed the following:

I put up a one per cent protargol solution, to be used as an injection four times a day. I painted the glans with an

ichthyol ointment, and painted around the eyes with the same, directing him to use the urethral injection also as an eye-water. Noting the danger of corneal ulcer I also had him use a half per cent atropia solution three times per day for effect. Internally I prescribed half a grain of calcium sulphide granules every half hour and ordered a saline laxative, two drams in the morning or oftener if bowels were slow to act.

The anticonstipation granules, four to eight per day, were also given to inspire activity of the bowels. That the urine might be rendered less acid I gave him a potassium acetate solution to be used about 30 to 60 grains in the twenty-four hours, according as the urine burned him.

This, with a syringe, is a combination I put up for \$5.50, but wishing to be easy on the boy I offered to treat him a week for \$10.00, seeing the landlord was acting so generously toward him. This last offer the boy refused, saying he would take the medicine and return when he had used it. I told him his life was in danger, making him feel at the time that I did not know much. He had seen "clap" and knew of its "bad as a cold" reputation. All he wanted was to get the discharge stopped. In the next three days I did \$100 worth of practice and at last looked in to see the boy, finding him much improved and hopeful.

A week passed. I was not called to the boy and heard no word from him. Practice rushed me so I neglected to drop him a free call. About ten days after his first visit to my office I was called to see him, finding his joints swelled and his eyes worse than ever. He had taken no medicine for about six days. Cases like this, of course, do



Headache with corpse-like pallor, is relieved by vasodilators; with congested face, by vasoconstrictors (glonoin and ergotin).—Greene.

Arteriosclerosis and cirrhotic kidney—sodium nitrite and sublimate absorb new connective.—Greene, *New York Medical Journal*.

not have a nurse. The boy had a high fever. With a saline, the trinity and methylene blue I soon settled the fever, then with calcium sulphide, ichthyol, phytolaccin, calcidin, nuclein and 30 grains of oil of gaultheria, in capsules, I made that joint-swelling nearly vanish.

The boy was up and on the streets in a few days but soon was down again, not keeping up the medicine, as I advised. Again I did about the same and again the boy was up and limping around, but in a few days down again and this time it required my attention twice per day for about two weeks to get him up, after which he was very weak.

To get stronger and to take a better rest he was sent to the county hospital, from which he returned, limping a little, after a month there under medical supervision, but according to his statement getting little medicine. Two weeks more went by and I heard he was down again, and he had called another doctor who, for swelling of the limbs has placed him in plaster.

In this valley malaria is omnipresent and a case like this always has a malarial factor which indicates a change of climate. For financial reasons such changes cannot be made as easily as we can talk about them. I may also mention that in treating the gonorrheal rheumatism I used with the gaultheria daily, 20 or 30 grains of ichthyol in capsules with, I believe, a good effect. The joint-swelling yields quickly to the oil of gaultheria as well as to calcium sulphide and calcidin.

To make a permanent cure in such a case is not a very difficult proposition, providing good nursing and complete control of the patient is possible but

without these and in a malarial district the physician has a hard proposition to face.

C. E. BOYNTON.

Los Banos, Cal.

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We submit the case to the family. Can any one suggest an improvement upon the doctor's method? In our experience the calcium sulphide does the work in these cases—if given to complete saturation. The difficulty in this instance was that the doctor could not keep the patient under *constant* care and sufficiently prolonged medication. But these are often bad cases.—Ed.

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OSTEOPATHIC TREATMENT OF HYPERMETROPIA.

In an adjoining office is a physician and surgeon, a friend of mine, who is a Rush graduate. His son often visits my office and noticing that he put on a pair of glasses when he read, I questioned him and learned that he did so when reading for some time. Examining his neck, I found the second cervical vertebra laterally twisted. Later discussing with his father, the ability of an osteopathic physician to reduce a subluxation, I offered to demonstrate and calling the boy, pointed out to both the father and to an ophthalmologist who was present, where the lesion was located. Both recognized its presence as an "irregularity." I nearly reduced it, sufficiently changing the position that they said the irregularity was gone. Later the father voluntarily informed me that his son had not worn his glasses since and suffered no inconvenience from reading, his eyes becoming neither painful nor inflamed. The following is his statement of the case:

~ ~ ~

Loomis classed pneumonias into cases we can't kill, those we can't cure, and those that may be saved by treatment.

Vasomotor dilators and contractors are among the most important therapeutic agents at our disposal.—Green, N. Y. M. J.

This is to certify that the 14-year-old son of the undersigned suffered from defective vision, diagnosticated by a competent oculist as farsightedness and corrected by proper glasses. Whenever the boy went without glasses for a number of days, while attending school, he would have headache and feel languid. These symptoms were promptly relieved by again wearing the glasses. I had occasion to observe this at different times when the glasses were sent off for repairs. When my boy entered school this fall, he started in without glasses, experiencing no trouble. After having attended for a while, however, he again resorted to the glasses. This fact coming to the notice of Dr. Fiske, while the boy sat reading in his office, led the former to inquire into the trouble and to examine his cervical vertebræ. When I, a little later, stepped into Dr. Fiske's office, he said to me, "Doctor, your boy has a bony lesion." My interest was naturally aroused, and I most willingly had my osteopathic friend demonstrate to me that the spinous process of the second cervical vertebra deviated about an eighth of an inch to the left of the median line. Dr. Fiske then asked me whether or not he should correct the faulty position, to which I gave my consent. Manipulating the parts after the reduction, I noticed that the lateral displacement had subsided to within about one-twenty-fourth of an inch. Since then my boy has not worn his glasses and he tells me that his eyes give him no trouble whatever.

Respectfully,

(Signed) L. W. JUERGENS, M. D.

The account of the ophthalmologist is as follows:

On examination of the boy, I found him wearing convex spheres and as he had clear vision for distance, this shows that he was a hyperope. I also found an irregularity in the bony structure of the neck about an inch and a half below the occiput, which was removed a few seconds later by a simple treatment of Dr. Fiske. The irregularity had almost disappeared. On asking his father in re-

gard to the condition of the boy's eyes after this, I was told that he was not complaining any more, although he now reads without the use of his glasses.

(Signed)

E. C. ROOT.

The probable explanation is as follows:

The superior ganglion of the cervical sympathetic nerve lies on the rectus anticus major muscle, opposite the second and third cervical vertebræ (Quain), lying behind the internal carotid artery (Gray). If the vertebra (in this case the second) is rotated on its body, the transverse process will be pushed forward on one side, retracted on the other. This would cause an irregularity in the bed of the transverse process on which the ganglion lies, resulting in an irritation every time there occurred a contraction of the muscle or a pulsation of the artery. "Gradually applied pressure may paralyze the nerve without exciting it, but on removal of the pressure the recovery of the sensory fibers is accompanied by excitation processes."—(American Text-Book of Physiology.)

This rotation of the vertebra will also cause an irregularity in the line of articular processes which can be palpated. (Sometimes the spinous process is crooked, so diagnosis based on its deviation is not accurate.) Granting that the lesion may be palpated and that its presence may affect the ganglion in question, it remains to trace the effect to the eye. Quain says that fibers from this ganglion, through the carotid and cavernous plexuses, reach the lenticular ganglion, which the American Text-Book of Physiology says is concerned with accommodation. In this particular case, the boy was troubled with difficult accommodation, the eyes soon tiring when focused



See The Physician as an Investor, by Lydston, an instructive editorial in the *New York Medical Journal*.

Cabitto showed the perspiration of epileptics is poisonous and Krainsky proved the same thing for the blood.—*Med. News*.

for near work. The osteopathic explanation is that there was an insufficient supply of nerve force, caused by the lack of conductivity in the nerve affected by the lesion mentioned, but on removal of the lesion, the flow of nerve force being sufficient, accommodation was accomplished without strain.

FRANKLIN FISKE.

Portage, Wis.

—:o:—

We have to thank you for your account of the case of hypermetropia which you treated osteopathically. We quite appreciate the fact that osteopaths are increasing and that a better class of men are now studying osteopathic practice. We always have believed that there was some good in everything, and while we cannot believe that an osteopath can do all that he claims he can do, yet we do believe that an educated physician can add to his usefulness by becoming acquainted with osteopathic methods.—Ed.



URIC ACID?

Dr. Woods Hutchinson's paper on "The Uric Acid Delusion and the Prevention of Gout," has been watched for by all who heard the brief extracts from it read at the last meeting of the Section of Pharmacology of the A. M. A. The complete paper appears in the *Association Journal* for December 3, to which we refer those who will appreciate this article. We present herewith some of the salient points:

Whatever be the cause of gout, it is not uric acid; hence we dismiss from its therapeutics all means of promoting or lessening the formation of uric acid or eliminating it or any of its precedents.



Cerebrospinal fluid drawn from epileptics during the paroxysm caused convulsions and death in animals.—*Med. News.*

This delusion began with Garrod, and led to "the brilliant and attractive speculations of Roberts and the flatulent absurdities of Haig." Uric acid is not toxic, is not a result of imperfect combustion of proteids of the urea series; as appearing in gout it is a result of destructive metabolism of the nucleins of the tissues and not derived from the food, and while some uric antecedents, like the purins, are more toxic than uric acid it is exceedingly doubtful if they are sufficiently so to account for the symptoms accompanying them—they are an effect rather than a cause of the intoxication.

All the lesions of gout may be produced by a poison not even organic—lead. No urates here. Typic gouty urine appears in the early stages of mild fevers. The same phenomena follow inoculations with infective organisms. The most common cause of these symptoms is alcohol, as wine and beer—rarely spirits. We are probably dealing with a direct intoxication by alcohol or the ether, ester or acetone attending it, so that we have two instances in which toxics formed outside the body cause gout. Case study leads to the belief that we are dealing with external intoxications or impaired digestion and assimilation, resulting in abnormal poisons forming in the alimentary canal, or excessive absorption of toxics normally formed during digestion. Diet will be regulated more by its toxic-producing properties than its nitrogen or nuclein contents. "It is quite as important to know what kind of a patient the disease has got, as to know what kind of a disease the patient has got."

It may be in exercise, in bathing, in sleep, in mental stress, in hurry after

Pellegrini found the cerebrospinal fluid of epileptics highly toxic if drawn directly after an attack.—*Med. News.*

meals, even in errors of refraction, that the crux of the lithemic problem will be found to lie.

Much uric acid is found in the urine and tissues unattended by any gouty or lithemic symptoms.

The behavior of the gouty paroxysm is not reconcilable with the theory of its causation by uric acid; but it fits perfectly with the view that it and the paroxysm are alike due to toxics. There is at first a marked decrease of uric acid elimination; there is no proof of excessive deposit later in tissues or urine; urates appear plentifully during the decline, due to breaking down of cell nuclei by the toxin.

The rise in urates is accompanied by a parallel rise in the phosphoric acid excreted; and nuclein is a purin base with nucleic acid, whose radical contains phosphoric acid, the two results of a destructive metabolism of the cells being uric acid and phosphoric acid. We have thus grouped together an enormous variety of mild chronic intoxications, infective, dietetic and autotoxic, the sole unity being the production of uric acid.

As to the tophi: Uric acid is not toxic enough to account for the irritation; large masses of biurate are deposited without giving rise to any symptoms; the deposits do not correspond with the attacks; the tophi are symptoms of toxins attacking the joint tissues as are the fibrous nodules of rheumatism and the exostoses of rheumatoid arthritis. In rheumatism we have various acute streptococcus and staphylococcus joint infections, one of which, gonorrheal, has been already split off; arthritis deformans includes at least three toxic or toxoneurotic processes; and in rheumatism is another by-product of cell destruction,

lactic acid. These deposits are local products rather than from the general circulation. For (1) gouty blood contains no excess of uric acid; the toxins attack the tissues about the joints as regions of least resistance, slowest circulation and lowest vitality, the tissues die *in situ*, and with the assistance of the leucocytes break down into masses of sodium urate and into phosphoric acid, the latter swept into the blood and eliminated in the urine; or if enough lime be present the exostoses of chronic gout are formed. (2) In the gouty an injury to a joint may precipitate an attack here; and the joints most exposed to trauma, the big toes, are most affected, next the thumb.

Tophi form in the gouty because the cells have just enough resisting power to die in opposing toxins and form urates. In the acytic the cellular resistance is deficient and no struggle results. In the hypercytic the cells win the battle and neutralize the toxins, also disposing of their own dead.

Throughout the animal world the presence of purins favors the deposit of lime salts; which with the production of urates is one of the incidents in slow, non-suppurative tissue-necrosis. The same phenomena of uric acid and lime deposit attends the formation of calculi—a deposition of successive layers by living cells to cover up a foreign body. Probably in this lime deposition we have a neutralization of toxins.

Gout might be defined as "any form of mild chronic intoxication occurring in an individual of a medium grade of resistance and resulting in the deposit of uric acid or the urates in the tissues or the urine."

Experiments convince me that cholin causes the convulsions following injections of fluids taken during epileptic paroxysms.—Donath.

No truth in medicine seems to be securely established. Woodruff desires the prohibition of alcohol in the tropics withdrawn.

Prevention, however, is neither hopeless nor indefinite. Find the special cause in each case; search from the roots of the teeth to his refraction and the possibility of lead under the nails. It may be perverted normal metabolism, an error in refraction, mental worry, grief or overstrain; an external infection, tooth ulceration, septum ulcers, acne, furunculosis; a large majority autotoxic of intestinal origin—and here our reliable remedies won their laurels. The alkaline laxatives check acid fermentation and sweep putrescent matters out before they have time to give off toxins to the blood. The intestinal antiseptics prevent fermentation in the alimentary canal. The alkalis reduce the acidity of gastric digestion, possibly neutralize toxins, usually acid, and are laxative. Lastly, renal and other eliminants, colchicum, iodides, acetates and niter. Almost every remedy found useful for gout prevents the formation or absorption of intestinal toxins or promotes their elimination.

Diet may be surmised up in this: Direct such food as will in each case reduce intestinal putrefaction to the minimum, while abundantly supporting strength. Proteids as such have absolutely nothing to do with the production of gout. Some of the worst cases live on bread, butter, potatoes, sweets and tea. The fault usually does not lie in the diet, except as it may be deficient or excessive. The value of vegetables is in their unattractiveness, a polite form of starvation merely. Better increase oxidation than lessen intake. Above all—water, internally, externally and eternally. Digestive processes are processes of hydration; it is the finest eliminant we possess; 99 per cent of our body cells are aquatic

organisms still, and must be kept flooded with water to live. The dissolved salts are a matter of taste—the one active agent in all mineral waters is H_2O . This paper says what we have been saying a long time, and says it better.



OPENINGS FOR DOCTORS.

There is an opportunity for an energetic doctor who wishes to see his family enjoy continued good health and who will be satisfied with an ordinarily good living—not too hardly earned—to settle in one of the most healthy parts of Arkansas. The present incumbent has raised peaches weighing over a pound and has several acres of orchard and unimproved land (which is rising in value) to dispose of. The practice is good and fees paid. There are personal reasons for his desiring to depart. The doctor says that the man who gets his place gets a good thing and we believe him. The prospective Arkansan should have three or four thousand as a new house is required. Anyone interested address Dr. E. Etheridge, Stattler, Arkansas.

There is also an opportunity at Idaho Springs, Colo. The locality is a good one, and the present owner will sell practice and household furniture and rent the house to the right person. The altitude is too high for the doctor and this is really a good opportunity for some one who wants to get a start. Address J. B., Finucane, M. D., Idaho Springs, Colo.

In addition a young doctor has written us, a very able man, that he wants to enter practice in the Southwest. Little money—but a hustler. Write us if you have an opening.



Ankylostomiasis has cost the Miners' Association of Germany a million dollars. Heat in mines favors the disease.

Syphilis is a specific fever; primary local, secondary hemic, tertiary sequelae from toxic debris.—Jonathan Hutchinson.

AMONG THE BOOKS

Materia Medica and Pharmacy, Exercises in these branches for Students, by P. A. Fish, D. Sc., D. V. M., second revised and enlarged edition. Published by the author at Ithaca, N. Y., 1904. \$1.00.

The book is for the laboratory and to be used under the guidance of a teacher, and is, we confidently think, intended to be eminently profitable for both teacher and pupil. There are features in this book which betoken a grateful advance in the medical and pharmaceutical professions. We congratulate Prof. Fish on his work

P. Blakiston's Son & Co., Philadelphia, publish a very handy interleaved *General Catalogue of Medical Books*, arranged alphabetically by authors and also by topics and giving not only their own publications, but those of other publishers as well. Only twenty-five cents and very useful.

Practical Dietetics, by Alida Frances Patee, is just what the title claims it to be—practical. It is not enough for us to know that this, that or the other article of food or beverage is good for the one or the other patient or convalescent, because their physiological or pathological condition is met by the chemistry of the special aliment we prescribe; we and the *entourage* of our patients often need to know *how* a dish is prepared in the kitchen and how it is to be served toothsomely and appetizingly. And it is for the last named

qualities that the author, herself an educated practising nurse and teacher of nurses, deserves thanks for the service she has done for physicians and their patients. The book is in its second revised and enlarged edition. It is published by the author herself at 52 W. 39th street, New York. Price, \$1.00.

Medical Laboratory Methods and Tests, by Herbert French, M. A., M. D. (Oxon), is published by W. T. Keener & Co., Chicago, at \$1.50. This little book of 143 pages, seven by five inches, is intended for the physician's own laboratory. It gives a detail of the common methods, and is specially useful in pointing out the fallacies into which the best of us, when we work alone, may fall. The illustrations are abundant and sufficient to give an idea of the things illustrated.

Alienists as well as wide-awake physicians, generally will be glad to learn of the publication by the F. A. Davis Company, of Philadelphia, of the late von Krafft-Ebing's *Text-Book of Insanity*, translated by Professor Chaddock of the St. Louis University.

The value of this text-book consists largely in the aptly illustrative cases. While the book is not, by any means, void of theory yet its deductive teaching, especially in practice, is derived from clinical observations by the author himself and by others. In medical mental science this book is a monument to the much-lamented author. The medical

world is better off for his having lived. Price \$5.00.

Dr. Geo. M. Gould has added to his list of medical dictionaries still another by the title *A Dictionary of New Medical Terms*. It is tendered as a supplement to his Illustrated Dictionary of Medicine, Biology and Allied Sciences, and is based upon recent scientific literature. This supplement, like all the other dictionaries of the author, is very useful, and it will be of special value to those who own the earlier editions; corrections made in these various editions have, for the most part, been incorporated in this supplement.

The author says in his Preface: "Those who may detect any sins of omission or of commission are requested to notify me in order that future editions may be made more accurate." We hope he will in his next editions incorporate the words "Dosimetry" and "Alkalometry." A dictionary maker may differ from any therapeutic method, but he has not the liberty to omit the mention of it from his Dictionary. Dr. Frank P. Foster has "Dosimetry" in his unsurpassed Illustrated Encyclopedic Medical Dictionary of 1888, and in his Appleton's Medical Dictionary of 1904. Dorland began to have "Dosimetry" and "Alkalometry" in his very handy "American Illustrated Medical Dictionary," in his edition of 1901. Stedman's Dunglison's Medical Dictionary, twenty-third edition, 1903, has both "Dosimetry" and "Alkalometry." Duane's "Medical Dictionary," fourth edition, 1902, has "Dosimetric system" and gives an excellent and most up-to-date definition of that steadily-growing therapeutic method. We rest our case with our

thousands of readers, and are ready to hear the author's defense.

Dr. Gould will be well advised to read our review of the second edition of his Illustrated Dictionary of Medicine in the December CLINIC, 1902, p. 1122. He will also be benefited by consulting "New Words" in the August, 1904, volume of the Practical Medicine Series." Comparing the letter "A" in this with Dr. Gould's present volume we find the former have an advantage of 43 words. We very kindly offer this suggestion for the next edition of the present work.

A Laboratory Manual of Human Anatomy, by L. J. Barker, M. B., Tor., is a most excellently planned and well illustrated Dissector. Publishers: J. B. Lippincott Company, 1904, \$5.00 and worth every cent of it.

Normal Histology and Microscopical Anatomy. By Jeremiah S. Ferguson, M. Sc., M. D. Of the many books that have been written upon histology we have not seen in recent years one that pleased us as much as this. To begin with it is more complete, treating the subject with detail commensurate with the increasing importance of the subject. To understand pathology one must know histology, and indirectly this is essential to intelligent therapeutics. It need hardly be said the treatment of the subject is readable—really made interesting; furthermore, it is made more plain by the wealth of illustrations. A large proportion of these are original and all are "taken from life," many from drawings made by the author himself. The whole field of histology is well covered, even such departments as the ductless glands receiving adequate attention. The chap-

Syphilis requires mercury, a true antidote, as soon as the diagnosis of chancre is reasonably certain.—Jonathan Hutchinson.

Ergot and digitalis increase the volume of blood in the lungs; and the pulmonary blood pressure.—Brodie and Dixon, *Med. Record*.

ter on technique will prove of great value to the practician. Dr. Ferguson's experience as a teacher in the Cornell University Medical School, New York, has enabled him to do work that will make its mark on medical literature. Paper binding, illustrations are all Appleton's best—and we all know what that is. Price, \$3.50.

The science and art of Orthopedics has received a most gratifying and valuable monograph on *The Influence of Growth on Congenital and Acquired Deformities*, by A. R. Brown. The original ideas and procedures detailed in this volume are rational and commendable. The book is well illustrated, well printed and bound, and has an unusually full index.

Publishers: Wm. Wood & Co., 1905, \$2.00.

A very acceptable book upon the diseases of children is *Practical Pediatrics*, by Drs. E. Groetzer, editor of the *Centralblatt fuer Kinderheilkunde* and the translator, Dr. H. B. Sheffield, our well-known American pediatricist. The book is brief yet very comprehensive and always to the point. The *Materia Medica* contains many excellent new remedies that have not found their way yet into our *ex cathedra* manuals. The original author's intention is to enable the physician to test *cito, tuto et jucunde* (our alkalometric banner motto), hence the many alkaloidal remedies. It would not have hurt to have more of them.

We are glad to have German treatment of children's diseases brought so efficiently to the notice of the American profession. The book is excellently gotten up, with a full index, by the F. A. Davis Company, Philadelphia, 1905. \$3.00.



Glasgow is to send her sots to an island in the Hebrides owned by the city, where they may earn their own keep.

The Diseases of Society (The Vice and Crime Problem). By G. Frank Lydston, M. D. J. B. Lippincott Company, Philadelphia and New York. Price \$3.00.

In this important volume Dr. Lydston is dealing with a problem, or rather a series of problems, which are vital to the welfare and to the future of our society. Degeneracy, as manifested in crime, insanity, imbecility, the social evil and pauperism, is generally admitted to be on the increase. Penal, legal and religious methods of dealing with this problem have failed to check this retrogression, so that it is time that we began to look around for a solution. The problem is big enough to interest all of us. Dr. Lydston makes the statement that vice and crime cost the nation annually about \$200,000,000, or from three to five dollars for every honest man or twenty-five dollars for every family. Approximately one person in every three hundred and twenty in this country is criminal, insane or a pauper.

Dr. Lydston vigorously assails the Pharasaic method of dealing with crime on the basis that the criminal is simply "bad" from choice. Following the dicta laid down by Lombroso and others of the modern school he believes that this "badness" has a cause—and that this cause is physical; in other words we may consider the criminal diseased, or rather the product of imperfect development. Arrest of moral development is dependent upon imperfect physical development. Evolutionary laws control the production of criminals in the same way that they manifest themselves in every phase of physical life. The criminal man is, we might say, a primitive man. Civilization has developed in modern man certain moral

To realize the interest you as a physician must have in *How To Live*, compare a copy with one of *The Naturopath*.

ideas; the savage cannot appreciate these because of his imperfect evolution. The criminal has simply stopped at the stage of savagery and being unable to adjust himself to his surroundings receives the brand of Cain.

Starting with these fundamentals the author goes with care into the details of his subject. He traces the etiology, pathology, chemistry and symptomatology of these "Diseases of Society," and gives special attention to some of the varieties, such as anarchy and crime, sexual vice and crime, the race problem, genius and degeneracy. Finally he concludes with the "therapeutics," this being the portion of the book which is of most practical interest. The methods of controlling crime thus far employed he thinks generally ineffective. "Every penal institution, every expensive process of criminal law, is a monument to the stupidity and wastefulness of society." First he calls attention to the necessity for the regulation of marriage to prevent the propagation of defectives; for the same reason he recommends the sterilization of criminals of certain kinds. Improving the condition of the poor, by raising the environment and improving nutrition would do much to prevent crime. But most attention is given to the necessity for the proper training of children and especially children who commence life in the slums and on the streets. Here is the great school for crime. That much can be done has already been shown by experiments like the John Worthy School. And to this we wish to lend our indorsement.

This book is one that every physician should own and study. The problem with which it deals is of especial interest to the profession. The ground covered is

enormous, yet it is dealt with in Lydston's snappy, incisive style. He attacks evil with neither "fear nor favor." The book should have a good result.



Politics in New Zealand.—In reviewing "The Story of New Zealand," the admirable volume issued about a year ago by Dr. C. F. Taylor, of the *Medical World*, jointly with Frank Parsons, we commented upon some of the marvelous things that are being done in the economic world in what we consider "the antipodes." We hope many of the readers of the CLINIC procured this book and read it, for it is a revelation of possibilities, in government of which we hardly dare to dream in this country.

To those who are interested in good government, but who have to go charily in the matter of expense we want to recommend an abridgment of the magnificent larger book, which has now been issued in a popular form, paper bound, under the title given at the beginning of this review. This book, which is sold at the merely nominal price of 25 cents, contains more than 100 pages of closely printed matter. It deals with practically all the economic subjects considered in the larger book, but of course they are treated with less detail. We want to urge every reader of the CLINIC to read this book. Even though you disagree radically from the New Zealand way of doing things, you must admire a country which has learned how to settle the trust question, the labor question, the railroad question, has public ownership of utilities, simplified land titles, women's suffrage, old age pensions, state insurance, and a score of other things about which we are only beginning to talk.



Do your share toward educating your community in hygiene of the true sort, so as to root out the fakes now in the field.

Get some sample copies of *How To Live*, and form a club for it. This will benefit you by teaching the public true hygiene.

CONDENSED QUERIES ANSWERED

PLEASE NOTE.

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWERS TO QUERIES.

ANSWER TO QUERY 4599:—I just wish to answer Query 4599, by J. W. B., Tennessee. "Orchitis, Chronic, Traumatic." Male, aged 60. Tried antiphlogistine, tobacco, and bis. subnitrate (the tobacco was a pet remedy of the patient's). None of these seemed to do a particle of good, although I gave pilocarpine, gr. 1-6, till sweating was produced. But the case was cured by nitrate of silver, 20 grains to the ounce, painted on freely with a brush every two hours. However, this caused slight abrasions of the skin, so that were I using it again should use less frequently, although the abrasions soon healed up. I have gotten lots of good out of the CLINIC and wish to help others if I can do so.

J. STANTON.

Lusk, Wyo.

IN ANSWER TO QUERY 4629, about varicose veins, I will say the condition can be almost as good as cured if dose enough of hamamelin is given. You say three of hamamelin three times a day. Instead of that you should say three every three hours increased to four every three hours in a week. They are practically useless in small doses. I give in bad cases of varicose veins twenty-four to thirty-six granules per diem. The rest of your advice is all right.

S. F. S.

—, Illinois.

ANSWER TO QUERY:—I venture to suggest (however very late) for D. G. T., Tenn., January CLINIC, page 57, that if he will use a mixture as follows, I think he will greatly relieve and perhaps cure his flea bites: Carbonate ammonia, dr. 1; acetate lead, dr. 1; laudanum, oz. 1-2; rose water, oz. 8. M. ft. lotio. Sig. Direct that it be applied frequently during day and at night on lint or soft cloths.

Also, flowers of sulphur, two parts and cream of tartar, one part. Mix. Sig. 1-2 to one teaspoonful, three times a day, or perhaps the comp. sulphur granule is better. I think this will cure his case, using a good castile soap to wash off exudation around sores.

A. M. CRITTENDEN

Ferguson, Ky.

ANSWER TO QUERY:—Tell Dr. Feige, of Woodstock, N. D., to give his patient rhus toxicodendron 3x, and if a few doses repeated every two hours does not give desired results, give the 30x (Boericke & Tafel) for a few days four times a day. I have used this remedy for years for painful conditions following injuries and I do not now recall a single failure. I usually give the 30x. For bee stings give apium virus 30x, and report your failures.

E. A. EDMONDS.

Hebron, Ind.

QUERIES.

QUERY 4656:—"Stomach Trouble." about 28 years old. Trouble commenced Male, teacher in Catholic institution, four years ago and remains about the

same. Pain in stomach comes on generally from one to three hours after drinking any fluid, either water, tea, coffee or milk. Quite often pain is felt worse in morning on rising and sometimes a slight nausea. If exercise is taken after this drinking it will cause vomiting. Splashing sound is heard in stomach after drinking. He belches gas and complains of a sour taste in mouth occasionally. Eating seems to cause no bad symptoms—only the drinking. The bowels have moved every other day for the last four years. Tenderness on pressure over pit of stomach. Slight headache at times from nasal catarrh. No backache. Heart, lungs and kidneys normal. He also complains of a "sticking" in larynx for three or four years. It sometimes produces a little cough. Gave calcidin for throat with no results.

J. S. C., Illinois.

Have the stomach contents examined in this case. Give a Boas test breakfast and then make an examination of the condition of the stomach. This may be a gastralgia and it may be entirely a reflex condition, although *we believe* that you have a case of dilation and atony of the stomach walls. Allow us to suggest this treatment. Limit fluids and put the man upon a dry diet, giving every three hours hydrastin, gr. 1-6, strychnine arsenate, gr. 1-67, quinine, one granule; just before eating two digestive granules (strychnine arsenate, gr. 1-134; quassin, gr. 1-12; papain, gr. 1-3), immediately after eating caroid and charcoal, one tablet and follow one hour later with five grains of the triple sulphocarbolates given in powder, with one-half glass of water. Have the patient lie upon his back and massage over the abdominal region with olive oil, taking up one-half hour each sitting. Of course the stomach should be empty at the time of operation.

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Fitz demolished an ambitious advocate of surgery in gastric cancer by citing the results at the Mass. General Hospital.

Every third night hepatic (eclectic) (podophyllin, gr. 1-4; leptandrin, gr. 1-2; iridin, gr. 1-4; ext. nux vomica, gr. 1-16; powd. capsicum, gr. 1-3), two, and a small dose of saline taken in *very hot* water the first thing on rising every other morning.—Ed.

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QUERY 4657:—"Pregnancy." Married woman, age 27, about one year ago had induced labor at seventh month (forceps delivery), on account of albuminuria, convulsions, dyspnea, swelling of hands, feet, etc. No convulsions after delivery, but other symptoms continued unabated for two months. She could not sleep except sitting in a chair, and very little then. When sleeping had "most awful visions of all kinds of horrid things." There is no organic heart trouble. On going to a lower altitude, on an exclusive milk diet and alkaloidal treatment, improvement began and was rapid. The dyspnea came on three weeks after delivery. Her physician told her that she could never go to term in another pregnancy and live. She is now three months pregnant—is apparently well in all respects. Urine, acid, specific gravity, 1018; no sugar, no albumin; daily average amount 38 ounces; excretion of solids 752 grains daily; her weight is 107 pounds. The urine is clear and has but little deposit on standing. Urination causes slight burning or smarting sometimes. Bowels slightly inclined to constipation. This is the second pregnancy, the physician who attended her in the first now advises immediate abortion. I have advised waiting for symptoms calling for interference, and in the meantime treatment to avoid the necessity for it. She is on calcalith, salithia, and the anticonstipation granule. Will proper treatment be likely to succeed? What do you advise?

R. H. P., Colorado.

We think that the treatment you are giving this woman will unquestionably

The worst diseases we have to fight are those of the whisky-drinkers.—*Am. Med.* Gould says some good things.

bring her through to term in good condition. We do not see why there should be any interference, but if we had a sample of her urine we could tell more about it. We do not understand that she has a contracted pelvis, and if she is passing the amount of urine you speak of, no sugar, no albumin, specific gravity 1018, and excretion of solids 752 grains daily, there seems to be absolutely no necessity for interference with the pregnancy. In fact, it will be mischievous to do so in our estimation, judging from the description you have given us.—Ed.

QUERY 4658:—"Foot Pain." Widow, Irish, 40, never pregnant, family history good, personal history good. Habits exemplary, good circumstances. Nervous temperament, sandy hair. Trouble began about twenty years ago with sharp, stabbing pains in the fourth toe of one foot (she does not remember which one). The family doctor treated her locally and constitutionally but without help and finally they suggested an amputation of the toe, to which she had just made up her mind when the same toe on the other foot began to ache likewise. She refused to have both toes amputated, so changed doctors. Since then she has passed from doctor to doctor, taking all kinds of treatment from each, including regulars, homeopathists, osteopaths, quacks and patent medicine men. One man "cut into the toes," but she does not believe he "removed the nerves."

The pains have not spread to any other region or toes, but the last few years the attacks have been more excruciating. They come on generally about noon and last all afternoon and evening. Pains are relieved by removing her shoes. On examination during a pain nothing is visible, no swelling or redness, but on palpation a tender spot is found on the under surface of the toes, deep in the ball of the foot, on the side next to the great toe. She describes the pain as being

exactly like a throbbing toothache. I have not made a pelvic examination, but about ten years ago she took pelvic treatments from a very good man, for a displacement, but she says that she noticed no difference in the toe pains either before, during or after the treatments.

When she first came to me I applied guaiacol locally, which relieved the pain, but the odor is very offensive to her. Lately I have been trying the sinusoidal electric current (two cells) having her immerse the toes in water in which one pole is placed and applying the other to the spine, four minutes to the tip of the spine and five minutes up and down. As the spinal electrode passes over the lower lumbar and sacral regions it causes such pain that she can scarcely endure it. I have given her a treatment every other day for two weeks and during that time she has not had a single recurrence of the pain until yesterday, when it began before noon and caused her excruciating pain until evening. When I was called, gave another electrical treatment and the pain stopped.

F. E. M., Wisconsin.

The pain is clearly of local origin, and may be due to pinching of some sensitive structure—Morton's metatarsalgia, or to a corn. Don't laugh—the best foot-doctor we ever knew said if there were a locality on the human frame not liable to corns he had not found it. The relief following removal of the shoe is significant. Have her properly shod. But we are inclined to think it Morton's disease which is due to compression of the nerves between the metatarsal bones by improperly-fitting shoes. See that the footwear fits the foot, is sufficiently broad and the heel low, so that in walking the foot is not driven forward, as if a wedge.—Ed.

QUERY 4659:—"Reflex Neurasthenia." The patient, a woman of thirty-eight,

Philadelphia requires veterinarians to report all cases of infectious disease in man or other animals which they have knowledge of,

The unknown struggles which go on in the hearts of some men and women are as great as the most famous of battles.

weight one hundred and twelve pounds, one child, complains of dizziness in head, throbbing in back of neck, and "faint spells." There was a ventral suspension of womb about six years ago, and now she complains of much pain in womb and a nervous twitching before menstruation, which is about normal. She is a woman in very comfortable circumstances and need have no worries, yet she has all the symptoms of over-wrought nerves. Would you recommend any of the so-called rest cures? I should have said the bowels are about normal and she is sleeping well. She is improving slightly under macrotys and pulsatilla, alternated with cactus and scutellarin. Hemabalsoids as a tonic. Would you recommend any other treatment?

M. E. W., Ohio.

Just why the uterus, normally movable, should be rendered immovable by surgical means, we leave for the fee-hunters to explain; we do not approve it and are not surprised that trouble should follow. But you can sedate the uterus by the use of macrotin and anemonin, which she has already found beneficial; adding as synergists cicutine hydrobromate and even gelseminine; keeping the bowels clear and clean in the usual way, and reinforcing her vitality by digestants, and a well-arranged, nutritious diet. Iron valerianate a granule every waking hour, with two of quassin in solution before meals, would be useful. By these means you may and probably will afford relief without resorting to more surgery to amend the first.—Ed.

QUERY 4660:—"Uricacidemia: Pruritus." B. F., carpenter, born in Ireland, age 44, family history negative, no diseases of childhood; at age of ten he was kicked in the neck by a horse; small lump now on the back of the neck near the fourth cervical, left side. He had

typhoid nineteen years ago and made a good recovery. Present trouble came on two years ago; was diagnosed as rhus poisoning, hand swollen to elbows, face swollen. Eruption vesicular, itching intense. Then the same condition was found on the scrotum. The hands and face were sore for two weeks, on the face the right side only was affected. The scrotum has been a source of trouble since. The itching at times is intolerable. Comes on gradually; formication of thighs upper and hypogastric region. Growing thin and unable to sleep. Costive.

When an attack comes on can't see good. Feels weak; and if at night does not sleep at all. Appetite failing, but he is still out and working. Upon examination I found him thin, discouraged, no eruption on scrotum, left varicocle; reflexes slightly exaggerated. No signs of specific trouble. Heart normal, lungs normal; urine, specific gravity 1027, amber color, no albumin, no sugar.

W. B. R., Massachusetts.

The high specific gravity of the urine suggests diabetes, but no sugar was detected. Possibly the case may be one of those to which the designation uricacidemia has been applied. At any rate, the indications are to clear the bowels by an evening dose of podophyllotoxin to act on the liver, followed by a sufficiency of saline next morning; the alimentary canal to be disinfected by sulphocarbolates enough, and the diet to be strictly limited to the needs as to nitrogenous articles. Give him plenty of water to flush the emunctories, preferably taking it hot. For the itching let him take enough pilocarpine to cause sweating, as this has proved especially effective in many forms of pruritus from the presence of abnormal elements in the sweat. This is more scientific than simply seeking to smother the symptom by local means; but if these are necessary there is



Money is always forthcoming for our caprices; we only grudge the cost of things that are useful or necessary.

Ill-fortune may possess a majesty of its own, but society can belittle it and make it ridiculous by an epigram.

probably nothing as good as a lotion of phenol.—Ed.



QUERY 4661:—"Gonorrhea, Metritis and Gastric Complications." Female, age 27, married for nine years, no children. Gives history of gonorrheal infection a few months after marriage, contracted from her husband, inflammation extended to the uterus, tubes and ovaries, necessitating the removal of both ovaries about six years ago. At this time every month, she has violent attacks of pain in the pelvic region, intractable nausea and vomiting, violent headache, with constipation, reverse peristalsis to such an extent that there is sometime vomiting of fecal matter. Weak heart-action and pain extending up the left side under the shoulder blade. Altogether it is the most distressing case that has ever come under my observation. I have given her a degree of relief with phenobromate, gr. 5, strychnine arsenate, gr. 1-67, hyoscyamine 1-250, with hot foot baths, and if I could prevent the congestion of the pelvic viscera at the periods I think I could relieve to some extent.

R. T. B., Texas.

If there are any remains of the gonorrheal infection, as is likely, saturate her with arsenic and calcium sulphides for a month, by which time there will not be a solitary remaining gonococcus or any other microbe in her fluids or tissues. Three days preceding the monthly period begin with the powerful uterine sedative triad, gelseminine, cicutine hydrobromate and anemonin, giving one or two granules of each every hour till evident effect, which will probably be the drooping eyelids of gelseminine; then give less frequently so as to keep up some effect until the period has elapsed. These three all sedate the menstrual function, and aid each other in preventing the molimen—a shotgun to be sure, but as they synergize



Galbraith (*J. A. M. A.*) reports 50 consecutive pneumonias without a death; treated by quinine and iron.

we use them till we possess more accurate knowledge as to the specific powers of each.

For the gastroenteric irritability, make and keep the alimentary canal clear and clean; and sedate the stomach mucosa by cerium oxalate, gr. 1-6 every half or quarter hour till effect. The heart will probably require a tonic, cactus being our preference here.—Ed.



QUERY 4662:—"Whooping-Cough." How do you get the little ones to take your whooping-cough granules?

M. P. S., Kentucky.

The whooping-cough pill is easily taken by most children. It can be crushed and given in a little jam or jelly, put into some honey, swallowed with a teaspoonful of milk or water or flipped into the throat and some fluid given. It is one of the easiest things in the world, Doctor, to get the granules down the throat of a child, especially if they are given some little delicacy subsequently. We always carry in our case some of the menthol or clove tablets which we call "salt," and every time these little ones take the *real* granule they get a couple of the candy granules as a reward. Try this plan.—Ed.



QUERY 4663:—"Oral Ulcers." What is the best local treatment for ulceration of the mouth of a syphilitic?

S. H. H., West Virginia.

The best local treatment for ulceration of the mouth of a syphilitic is unquestionably to have it washed with H_2O_2 pure, swab with an alphozone solution and then insufflate aristol or euphen on the spot. The treatment must be frequent and the patient must be instructed

Galbraith looks on quinine as a heart tonic and an antiseptic; in pneumonia; his cases were not malarial.—*J. A. M. A.*

to protect the medicament from saliva for as many minutes as is possible. The means which he will have to take to this end will vary according to the location of the lesion. The writer has destroyed more than one syphilitic ulcer on the roof of the mouth and lips by cleansing as above stated and then painting with pure turpentine three times a day for a few days. The results are often remarkable. Constitutional treatment, of course, is as usual.—Ed.



QUERY 4664:—"Urethral Stricture."

I have a patient who has a stricture about one inch from the meatus. I tried dilatation and mild or nonirritating injections; he has never had a venereal disease, is not dissipated, is a married man and has been for about thirty years; is fifty-three years old, stout and healthy, weighs one hundred and eighty-five pounds. Has to get up to urinate two or three times at night. Urine slightly acid, no pus or other discharge and never has had a discharge, though almost a continual smarting at meatus with some inflammation in meatus and lips. He has been in this condition sixteen months. I have used everything I ever heard of and still he is no better.

He sometimes has pains in spermatic cord on left side only; he had mumps on that side thirteen years ago and the testicle has been tender since. After straining at a hard stool he sometimes passes a little prostatic fluid. The prostate gland does not seem enlarged or sore; he urinates without trouble or pain. I can introduce a 24 French sound without much pain. My last treatment was anti-blennorrhagic granules and euarol. Do you think an operation necessary?

J. D. D., Arkansas.

The only way to cure stricture is to have an internal urethrotomy performed, that is to say this is the only step left if sounds fail. There is no question but



Galbraith gave 115 grains of quinine to one patient with pneumonia within one hour after his arrival at the hospital.—J. A. M. A.

that this man has a hypertrophied prostate and massage through the rectal walls with the finger tip would unquestionably do good. Throw two drams of euarol into the rectum and massage the prostate with the finger tip through the "puddle" which this will form. Better cut that stricture at once, under cocaine anesthesia. After severing the stricture be sure and keep a catheter *en chemise* in the urethra for twelve hours.—Ed.



QUERY 4665:—"Pneumonia." I notice that you advise in pneumonia, aconitine, veratrine, digitalin, calomel, podophyllin, saline laxative, etc. Now what I want to know is, do you mean to say that all of these should be given at the same time, or should the aconitine, etc., be left off before giving the calomel, all of these to be left off before commencing with the zinc, etc.? I am trying to get ready to treat my next case of pneumonia according to alkaloidal method. By explaining you will greatly oblige.

J. I. T., Missouri.

In the treatment of pneumonia, aconitine, veratrine and digitalin are usually given in the granule listed as "the deferrescent compound." They may, of course, be given separately, as described in the article which you quote, but for convenience of administration the compound granule is more desirable. This should be given "to effect," that is, when the pulse softens and becomes less rapid it should be kept in this state by the continued use of granules at longer intervals. When you are called to a case of pneumonia you should, of course, commence the administration of these remedies at once, *delaying for nothing*. At the same time you should commence with your laxatives, the calomel and podophyllin followed by the saline, repeated until

Must we go on indefinitely accepting the impossibility of shortening pneumonias, or try for more practical results?—Galbraith.

the bowels are thoroughly cleaned out. Then you will give the sulphocarbolates to keep the intestinal canal in good condition, to prevent the formation of gas, etc. The defervescent is to be continued as long as there is any indication for their use, as shown by the character of the pulse and the height of the fever. In case the pulse is feeble, as in asthenic forms of pneumonia, instead of the "defervescent," use the "dosimetric trinity," in which strychnine arsenate replaces the veratrine.—Ed.

QUERY 4666:—"Coal Oil." I would like to ask you and your many readers to give me all the help you can upon the medicinal properties of coal oil. Also give formula to make an emulsion to conceal the taste of the oil.

M. C. R., Arkansas.

We shall be glad to submit this inquiry concerning the medicinal properties of coal oil to the readers of the CLINIC. There is one proprietary preparation, Angier's Petroleum Emulsion, which is largely used and is said to be excellent. Of course you understand that the "coal oil" used is not mere kerosene, but is a refined product and is more allied to liquid petrolatum. I believe the manufacturers claim that this oil facilitates the absorption of associated food products. Of course it is not absorbed itself. "Coal oil" is also used as a counterirritant and is often a very good one, as you doubtless know. It is a popular remedy for the destruction of head lice, etc. But we will see what the readers of the CLINIC have to suggest.—Ed.

QUERY 4667:—"Vascular Neurosis." I have on hand a case that I would like to have diagnosed. Woman fifty years

of age, had three children, one died with some cerebral disease at twelve years of age. Family history negative. German, been in this country about fifteen years. About twenty years ago she began to be troubled with cold hands, but this did not become really annoying until about two years ago. She has been treated during the past two years by two different physicians, and by all methods imaginable, judging by her story. I am not attempting to do anything for this trouble as I saw it incidentally while treating her for a small, irritable varicose ulcer of the leg which is healing. She had an ulcer near same spot fifteen years ago, again two years ago. The woman feels pretty well—only her hands are *ice cold* all the time, blue when exposed to the cold or put in water; after rubbing them and holding them over the fire they get *red* but *not* warm. She has good use of them, does her housework, knits, sews, etc. When they are blue they feel numb. What is it? If you can give me any light on this case I could be pleased greatly.

C. G. S., New York.

With the information we have at hand we should call this one of those obscure vascular neuroses to which it is hard to give a name, but which is certainly allied to Raynaud's disease or acroparesthesia—probably due to some functional or organic disturbance of the nerve centers. We make a mistake in many cases, by trying to give names to many of these obscure conditions. The essential thing is to correctly interpret the phenomena. Regarding treatment I would suggest that you try suprarenal. If we may believe Sajous, conditions of this kind are often due to the absence of this secretion. In addition to this the use of atropine to dilate the terminal arteries and used for a long time might be worth trying.—Ed.

Watching and waiting and expecting Nature to cure so formidable a disease as pneumonia does not impress me as rational.—Galbraith.

The Laws of Hammurabi, B. C. 2885, allow a surgeon ten shekels for operating on a rich man's eye, five for a poor man's.

QUERY 4668:—"Nasal Catarrh and Amenorrhea." A patient does not expectorate from coughing, but the infection seems to be from the posterior nares. Her coughing is perfectly dry and no rales whatever, but the amount of pus from the posterior nares is wonderful, and when she sucks or inhales forcibly to draw the offending matter from the above, she does not have to cough in the least. Menstruation retarded, very anemic. Have been pushing sanguiferin and all other medications energetically. She seemingly would be perfectly well were it not for the amenorrhea and the large amount of pus from the posterior nasal cavity, and the slight chill of the morning; afternoons she feels real well. Am using ozone inhalations after dinner from static machine, and pyrophosphate of iron with sanguiferin between meals.

G. H. M., Ohio.

Clean out the nasal cavities by a warm and mild antiseptic lotion; then to the cleansed surface apply euarol (europhen and aristol in oily solution), by a spray or with a dropping tube used as a syringe. Do this every day. This and the amenorrhea alike require the cure of anemia. If there is any evident cause for this, remove it. Make and keep the alimentary canal clear and clean—you well know how. Give iron phosphate and arsenate, a granule each every waking hour. Add intestinal antiseptics if the stools continue offensive; quinine arsenate a grain a day in divided doses if the chills continue. The raw blood foods are specially useful. Do not give direct emmenagogues, but wait till the woman has blood to spare.—Ed.

QUERY 4669:—"Sterility, Torpid Liver and Gallstones." 1. A lady who has been on local treatment with euarol and taken cornin five granules before meals and at

bedtime and triple arsenates with nuclein three before meals, for leucorrhea, is better; menstruation regular and she feels some stronger. Is still very nervous and not pregnant, which is the object of her treatment.

2. Young man, thirty-two, torpid liver. Has been on a vacation West and this, together with your treatment, has benefited him greatly. Stools almost normal and digestion still better. How long, if at all, will it be necessary for him to continue treatment?

3. I also have a lady with gallstones who has been taking sodium succinate and olive oil for two or three months with no benefit. She has attacks of pain every day and seems to be getting worse, passes great quantities of stones, size of pea and smaller.

F. H. U., Pennsylvania.

1. The woman in this instance may not be at fault. Have you examined the semen of the man? Cornin is not calculated to make a woman pregnant. In fact the writer has never prescribed cornin for the female, to the best of his knowledge. See to the cervical canal and dilate it if necessary. Correct malpositions of the uterus. It is quite possible that the *os uteri* tips upwards or sideways and so it becomes impossible for the spermatozoa to gain access to the uterus. How are you applying the euarol—swabbing the uterus, injecting it into the uterus, or applying it per tampon to the *os*? Give a good nerveine every two hours, scutellarin and cypripedin of each four every three hours, and a uterine tonic morning, noon and night.

2. This man would probably be benefited by bilein, two tablets two hours after each meal. But no liver case can be permanently cured, except by correcting the habits that lead to the trouble—such

Hammurabi's laws provided that if a surgeon caused the death of a slave he must supply another to his owner.

Hammurabi provided that if a surgeon caused the death of a rich man or lost his eye, the surgeon must lose a hand. Good idea.

as over-eating and under-exercising, with neglect of regularity in going to stool.

3. The calculi she passes are derived from the oil, which is useless. Take 20 grains of succinate a day, with six granules of boldine, and continue a year, employing the great antispasmodic triad for paroxysms (glonoin, strychnine arsenate and hyoscyamine) adding dioscorein two granules every ten minutes. If this, with possibly a whiff of chloroform to aid, does not give complete relief, there is present one of those mechanical conditions that require surgical intervention.—Ed.



QUERY 4670:—"A Gynecological Difficulty." Miss P., a young woman now aged 25 years; menstruation commenced at the thirteenth year and was regular until the age of 20; then she noticed a "watery discharge" from the left breast. This lasted a short time, then it became bloody; this continues to the present day. There is *always* a little oozing of blood from the left breast, accompanied now with pain; occasionally there is the "watery discharge." One year ago she complained of severe pain in the right groin, and was "unwell" twice in the month. Pain became so severe that she sought medical aid and was told there was "displacement of the womb and inflammation of ovary." Treatment did not help her. One of our best gynecologists was brought in and five months ago he curetted, since which time she has scarcely had one day free from slight uterine hemorrhage with pain, and pain and oozing of blood from the left breast. The lungs are healthy; heart sounds weak, pulse small, irregular, 75. She is constipated. Can I cure her with drugs?

J. M., Ireland.

We have to acknowledge that we are "up a tree." Perhaps if we had that



Plague has appeared among the Ural Cosacks. This item will not cause much grief among Russians in general.

woman on a table with a speculum *in situ* and half an hour before us in which to make an examination we might, at the end of that time form a diagnosis which would be worth having. As it is we can only say that the hemorrhage and watery discharge from the breast is one of those peculiar reflex phenomena which we occasionally see in uterine disease. The uterine hemorrhage may be due to any one of various causes. There may be a fibroma; there may be polypi and there may be a fungous endometritis—who can tell? Even the possibility of malignancy should not be forgotten. On the other hand the condition may be remediable. The constipation should be corrected, the uterus should be swabbed out with euarol (after, perhaps, a thorough douching with H_2O_2 one part, sterilized water one part) and, internally, that girl should take a good uterine tonic, triple arsenates with nuclein after each meal, and ergotin, gr. 1-6, atropine, gr. 1-500 (or hyoscyamine) and hydrastine, gr. 1-6 every three hours. You will find that the constipation will be relieved by giving from three to six anticonstipation granules, aiding, if necessary, with aloin, one or two granules after meals. Salines (in hot water) every morning on an empty stomach.—Ed.



QUERY 4671:—"Wart on Scar Tissue." I am 62 years old. At the age of five I had necrosis of the tibia and the main shaft of the bone was removed; not affecting the joints and the periosteum being partially preserved, it threw out new bone from above and below, but did not unite into a solid bone—but formed a cartilaginous joint.

Over this joint, or point of non-union is an extensive scar and on July last, a small wart made its appearance on this

The question of national physical degeneration in Great Britain is being warmly discussed; with widely divergent views.

scar, and has persistently refused to "down" so far, but has grown continually under any and all treatment that I have given it. I have tried caustics and pyrogallol, but having to use the limb continually, the pyrogallol ointment would irritate the adjacent parts so much that I gave it up and am now simply keeping it softened by a daily application of castor oil, which not only enables me to go about my business, but appears to retard growth as much as anything I have used.

Will you tell me the best way to get rid of this growth? It is now about one-fourth inch wide and a half-inch long, elevated one-eighth of an inch and crusts over every day; it is superficial and easily movable.

B. H., Washington.

We would suggest that the wisest thing to do is to have the wart excised. A growth of this kind which continues to increase in size in spite of any treatment, should be regarded with suspicion. It is in all probability benign, but the safest thing to do is to get rid of it at once while there is still no danger. By spraying the part with ethyl chloride it can be anesthetized so that the little operation will be painless. There is a bare possibility of its being a keloid, a peculiar fibrous tumor, which is peculiarly prone to develop on scar tissue. You will find it fully described in your text-books. Keloids, while entirely harmless, are likely to return after excision, and perhaps are better treated by electrolysis.—ED.



QUERY 4672:—"Investments." A Chicago firm has solicited me to send them money for investment, claiming to be safe and reliable, with unusual opportunities for making large profits. Do you consider the firm trustworthy? Would you entrust them your own money? Their offers are tempting, and

we who have but little to invest naturally like to realize as largely as possible.

E. L. B., Maine.

We have made diligent inquiry in regard to the firm you mention, and can find no trace of them in the business directories of the city or in the knowledge of prominent men in the same line of business. We would therefore advise you not to entrust them with any money.

Some time since we were solicited to invest in an oil company that was going to put the Bank of England out of business when its wells struck bottom. We did not invest; but some poor working girls did. One of them got uneasy because she did not hear of any dividends, and wrote for information. She received a reply stating that the wells had not succeeded, and a ten per cent assessment had been made on the stockholders; but so few of them responded that the company had wound up. No notice of assessment or subsequent action had been received by any of the stockholders here. One of the three promoters, evidently foreseeing the failure, had thought it a pity to put so much good money into a valueless well, and had invested all that came to his hands in a Western stock farm, which at last accounts was doing very well. What the other two did with theirs is not known.

Make your investments in enterprises of which you know personally. If you know no one at home in whose probity and capacity you have confidence, do not imagine you will find these qualities more easily among strangers. If you are young enough, take your money South and buy land; or invest in any enterprise *you yourself understand and can manage successfully*. Until you can do this, stick to the savings banks.—ED.



Infantile mortality is very high in Manchester, England, but comparatively low in the Jewish quarter, if mothers nurse their children.

The next meeting of the American Anti-Tuberculosis League will be held in Atlanta, Ga., April 17-19. Better go.

QUERY 4673:—"After Quitting Morphine." Two years ago I placed myself under a physician who had studied your treatment of drug habits, and in about three months I came out fine. Then I went to work, got weak, and now find it almost impossible to pick up. It is an effort to move much. I have had paralysis of the right side since last August, can walk now almost normally, articulation difficult, but am now improving fast. No venereal disease ever. At 54 years I ought to recover, but I do not seem to regain strength or vigor. I am not touching morphine or any narcotic; have no desire for them; am taking a tonic of nux and phosphorus, with cod-liver oil and hypophosphites; with such good food as eggs, steak, oatmeal, etc. I am doing little work, and use once a day the galvanic current. My appetite is good, bowels regular, no aches or pains. If you can lay your finger on the suffering point please do so. I am sick of feeling as if eighty.

X. Z., New Hampshire.

We remember quite well our former correspondence, and would like to grasp your hand in warm congratulation, feeling an appreciation of the strong resolution displayed by a man of your age in plucking himself out of this frightful quicksand.

In regard to your present condition, we are strongly inclined to look on the trouble as due to two causes: First, autotoxemia, and second, although this is the cause of the first, that sluggishness with which the vital functions are performed when deprived of their customary stimulant. Please, Doctor, whenever you are feeling badly take your temperature. Beware of a subnormal temperature. Take podophyllotoxin granules, gr. 1-67 each, two at bedtime. Increase the dose if this does not produce characteristic stools in the morning. Next comes

nuclein solution, of which you should drop ten drops upon your tongue, allowing it to be absorbed from the mouth as much as possible, three times a day. Third, strychnine valerianate granules, gr. 1-67 each. Of these take enough to impart normal tone to your relaxed tissues; five granules four times a day being an average dose; but you may require much more than this, or much less.

Begin with a granule every half to one hour, and continue until effects are manifest, then take in the same way, or for mere convenience divide the required daily dose into four portions, taken in solution before meals and on going to bed.

There is one more word to say, and a very important one. Few habitues, even physicians, realize the power of suggestion in this habit. Erlenneyer wisely advises to change even the furniture of the room; for the habit of going to a certain drawer for the morphine will arouse the recollection of it, whenever chance leads you in that direction. Change everything that was associated with the drug; your home and furniture, etc. Keep up elimination, and tone, scrupulously. A change to another part of the country would be wise; especially to the warmer South.—Ed.



QUERY 4674:—"Malnutrition in Infant." Last May we had a case of confinement (primipara, instrumental) which was followed by mammary abscess; pus deep in and below gland. The babe had to be bottle-fed. A lady friend whose babe was about the same age nursed our little patient for some three weeks. The improvement was marked, but the parents concluded to have mother and babe spend the summer at the home of its grandparents in the western part of this



The students in a medical college have been devising means to get rid of the "antiquated teaching" in some branches.

Students in a medical college claim that in one branch second year men are better "up" than their Professor. Who is it?

state. Being abundantly able there was nothing skilful physicians could direct that was not done. The greatest difficulty is in the fact that all forms of milk are apparently poisons to its stomach. Recently they returned home, the babe 1-4 pound heavier in weight than when it was born; at seven months it weighs 7¾ pounds. I find they feed it toast water and bovine at one feeding and Mellen's food and water. They are away up to thirty drops of bovine. They believe that the child receives more strength from this bovine than from anything else they give it. It was evident the dose of bovine was too large as it caused diarrhea. The last time they used milk the result was so disastrous the mother declared she could not use it again. By showing her the importance of such food she agreed to cut down bovine to 10 to 15 drops to prepare lamb's broth and give it and Mellen's food; to continue toast water if they wished. I urged them to procure some good fresh cream, diluted with water, properly sweetened and give a few spoonfuls between each bottle of the other food, to learn its effects and if evil occurred to suspend. I gave nuclein, also brucine and occasionally hyoscyamine. The babe's stomach does not give trouble from vomiting lately, and there is no considerable suffering except what appears to be from hunger. While almost skin and bone, nevertheless its eyes are bright; it will notice and laugh at times. Its bowels are pained when the casein curds are passing, but comparatively painless when the food does not cause trouble. If you can give me a suggestion or two I will be most thankful. Start this baby on the way to health.

A. H. H., Ohio.

Send to the Cereo Co., Tappan, New York, and get a bottle of Cereo. Now prepare barley gruel or plain wheat flour gruel according to the instructions accompanying the Cereo, adding the slightest quantity of cream. After a few days gradually increase as the stomach tol-

erates the addition. Five drops of the bovine three times a day at the mid-hour between feedings will be ample. This should be dropped on the tongue and allowed to be absorbed and great pains should be taken to see that the bottle, neck, cork and dropper are kept scrupulously clean. You can readily realize that deposits around the neck of the bottle may become a fertile field for germ production and the next dose poured from the bottle passes these germs into the baby's stomach, hence the diarrhea. Into a glass of water drop a tablet of the sulphocarbolates, sweeten slightly and give a teaspoonful or two half an hour before and one hour after feeding. Wash out the bowel with warm saline solution every three or four days and stop every other medication with the exception of nuclein solution. Of this give two to four drops on the tongue morning and night.

Every child is a law unto itself as regards its food and sometimes we are simply compelled to use the food we find agrees best without knowing why, but I would rub this child from head to foot with hot cod-liver oil every day.—Ed.

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QUERY 4675:—"Ergotin." "Tufnell's Method in Aneurism." I want some ergotin to use hypodermically to lower the blood pressure. What is the proper sized dose for that and what is the best form? Have you a better method of treating an aneurism of the abdominal aorta than "Tufnell's method," combined with hypodermic injections of ergotin?

W. R. T., Nebraska.

We would give it as our opinion that Tufnell's method is satisfactory—that is, as far as it goes. Dry diet and perfect rest are decidedly beneficial. The diet-

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Hairpins have served as female catheters, probes, tenacula, drains, retractors, harelip pins, specula, etc.

"Don't you feel the South a-calling," with the thermometer at 15 below this morning, and a non-resident janitor?

ing must be continued till signs of reduction in the size of the sac are evident. The use of ergotin is in our opinion absolutely contraindicated. You cannot possibly lower blood-pressure by the use of ergotin. Veratrine or even aconitine are of service and you will find that calcium iodized will give you better results than iodide of potassium. The latter has to be given in large doses and soon disturbs nutrition. The use of gelatin has proven a failure in this country as has the placing of silver wire. Scratching of the internal wall of sac is simple and has given results. But after all the condition defies treatment. Heroin is useful to relieve pain. Glonoin relieves the cyanosis.—Ed.



QUERY 4676:—"Autotoxemia; Pulse and Temperature in Typhoid." I. Mrs. H., age 26, married, two children, weight 165 pounds, has constipation to some extent; belches a good deal, a hearty eater, has peculiar "weak spells." Can't say what she tries to do while spell is on; conscious all the time, pulse very fast at the time, headache worse then and belches freely at the time; over in a little time—few minutes. Spells occur irregularly, sometimes daily, but at times two or three months intervene between spells. She has been in this condition for twelve or thirteen years; no worse now than before. Diagnosis and treatment wanted.

2. Kindly state your treatment of typhoid fever briefly. How rapid pulse in typhoid fever, temperature 101-103 could you feel safe in, outside limit of safety in young adult?

J. E. H., Texas.

1. Relieve the bowels by the use of the anti-constipation granule, given in strict accordance with the directions. Add one granule of physostigmine three times a



There is something invigorating in the keen, cold air of Chicago; that makes it delightful even in midwinter.

day on account of the gas. Regulate her diet also and give her when the spells occur some granules of capsicum, of which she can take one every five minutes until relieved, chewing the first one up and following ones dissolved in a little hot water.

2. It is impossible to give our treatment of typhoid fever in the brief space at our disposal. It is too important to trim down to the extent this would render necessary. You had better send for one or more volumes of American Alkalometry. The cost is only a trifle and you get not only our views, but those of others and plenty of reports from the clinical application of our principles.—Ed.



QUERY 4677:—"Indurated Mammary Gland." About two months ago there appeared a slight induration and tenderness in the upper part of the left breast of my wife. It does not appear to enlarge any but is slightly more tender, yet giving no pain except when touched with unusual pressure. She appears to be in perfect health, occasionally having a slight prolapsus of the uterus, and occasionally a little tenderness. No ulceration or granulation. She is 44 years of age, married at 28. Two children, but only nursed each about three months. Breasts are firm, not large, and do not hang or "sag."

Nearly always regular with menstruation, 28 days, occasionally may be several days too soon, from no apparent cause. She is 5 feet 2 inches tall, weight 137, dark brown hair, blue eyes, rugged and feels perfectly well, not appearing to be over 35. Five years since last pregnancy. Would you suspect cancer? Give me your advice and treatment.

W. M. B., Idaho.

In this case I would rely upon a single remedy. Give phytolaccin, one gran-

In rheumatism, hot antiphlogistine applied locally and properly covered will often add greatly to the patient's comfort.

ule every two hours while the patient is awake, gradually raising the dose to the full limit of toleration and keeping it there. Keep the bowels clear and aseptic and do not allow any irritation of the affected parts.—Ed.

QUERY 4678:—"Rheumatism of Hands." I should like to know what you would recommend for rheumatism of the joints of the fingers and hands in a young woman 35 years of age, which has persisted in spite of all treatment for some time.

S. C. B., Pennsylvania.

A saline, one teaspoonful every morning, in a glass of hot water and calcium carbonate compound, one three times daily with macrotin one and bryonin one granule. Have the hands bathed twice daily in a solution of epsom salt (saturated) and one hour after each meal give five grains of the sulphocarbolates; crush the tablet and give it with one-half glass of water. Keep the bowels open with calomel and iridin, one granule of each, podophyllin grain 1-6 and leptandrin grain 1-6, half-hourly for three doses from eight p. m., two or three times a week.

In the first place I am by no means sure that this is rheumatism. It does not look like it, but if it be this the principles of treatment are those laid down in other cases among these queries. You are never wrong in applying the principles which underlie all treatment, namely, putting the alimentary canal in order so as to stop autotoxemia, regulating the personal hygiene and curing every source of reflex irritability you can find. Other treatment must wait for a more definite diagnosis.—Ed.

It is very necessary that an exact knowledge of drugs should be possessed by every man to be a successful practitioner.—Brunton.

QUERY 4679:—"A 'Specific' for Asthma." Is there any "specific for asthma? If so, I should like to know what it is. One of my helpers had an attack of asthma today. I gave calcium iodized, of course, but it had no effect. I gave her eight doses of my lung balsam and iodide of potash and just got some relief so I could send her home at 7 p. m. C. G. C., Ohio.

There can be no "specific" for asthma, Doctor, for the simple reason that asthma is a symptom of some other more important disease. It may be bronchial, cardiac or nervous. The spasms in each case, however, are usually promptly checked by administering one granule each of glonoin, apomorphine, strychnine and hyoscyamine every fifteen minutes in a little hot water.

Glonoin very quickly relaxes spasms. Hyoscyamine prolongs this effect. Strychnine imparts the nervous control the lack of which permits spasm to occur. Apomorphine powerfully stimulates mucous secretion in the bronchial tract. These remedies act well together and are intended for the paroxysm. In the intervals the general condition must be considered and most frequently this means that we must clear the alimentary canal and render it aseptic, so regulating the food as to avoid the occurrence of that condition which is popularly termed uricemia. Local disease in the nasal tract and other sources of reflex irritability are to be detected and removed.—Ed.

QUERY 4680:—"Physiological Salts." Kindly inform me in THE ALKALOIDAL CLINIC what you understand by "physiological salts" and "physiological earths." The physiological salts have a taste like sodium chloride and the earths look like powdered pumice stone and

Belladonna has a marked tendency to fix on peripheral ends of nerves going to glands and involuntary fiber.—Brunton.

taste like a mixture of pumice stone and sugar of milk with a slight flavor. Both preparations were handed to me for my opinion.

F. K., New York.

If you will address Boericke & Runyon, 5th Ave., New York City, you will be able to get all the available information about the "physiological tissue salts" as they are termed by a certain school of physicians. The homeopaths are inclined to use the tissue salts (nine of them) to a considerable extent. Natrium, ferrum, magnesium, calcium, silica, etc., are the chief ones in the list, but of late some Michigander states that he has discovered several others (if we are not mistaken he lists twenty-six) and each and every one of them is supposedly present in the human body in certain proportion and all disease is due to some disturbance in their proportion; find out which "tissue salt" is lacking and supply it and you remedy the condition. That, roughly, is the theory—or rather the base of the theory which Scheussler elaborated. A rather interesting book written by him and published by Boericke & Runyon contains all the information upon the subject and gives a detailed list of the indications for exhibition of the "tissue remedies."

Our objection to the tissue remedies is that the ordinary food taken every day by every human being contains infinitely larger amounts of these salts than are admitted in the remedies. When you hear reports detailing results coming from a millionth of a grain of a substance given as a remedy when the patient has taken any number of grains of the same thing as food, you will not fail long in crediting the results to suggestion.—Ed.



The effect produced by a drug depends to a large extent upon the dose of the drug and the tissue it selects for first attack.—Brunton.

QUERY 4681:—"Pyelitis." I send urine for analysis, passed by a young man who has been treated by three or four different physicians. Widower, age 28, weight 145 pounds. Taken sick last May with a hard aching in region of bladder which gradually changed to small of back. A physician gave him a hypodermic of morphine and he went to work the next day. He was taken sick the following month with the same symptoms as above and some fever, etc. Said he was in bed four months. He was then treated by another physician for three months, during part of which time he walked up town. He came under my care two weeks ago. He does not look very much like a sick man, except that he is slightly pale. He has only lost about ten pounds in weight. Tongue slightly coated white, pulse 80, temperature normal. Said he could not *walk around or sit up* as it made his back sore in the region of the kidneys. Never passed blood or had pain in testicle. Bowels normal in action. No flatulence or scarcely any tenderness over abdomen. I had him walk some one day. The next he remained in bed, stating that he could not stand it to sit up or walk around as his back had begun to get sore again. Probably has a little indigestion at times. Says he can not sleep well at night. Has what he calls "nervous spells"; can't sleep and just feels miserable—has headache, does not know how to tell how he feels, except "miserable." I do not know what his trouble is. I cannot arrive at a diagnosis. I have examined him carefully. The other physicians could not understand why he did not get well. Neither can I. He had gonorrhea three or four years ago. No discharge now. No apparent soreness in region of kidneys. I am giving him mercury and nux vomica.

A. H. J., Indiana.

The report of our pathologist shows pus is present, albumin absent, sugar absent but bile exists. Specific gravity is very low. Now, Doctor, taking all the

Curare injected under the skin or into the veins goes to the motor nerve-ends and paralyzes them: even killing.—Brunton.

circumstances into consideration, we should consider this a case of pyelitis.

In this case I would advise the use of arbutin, grain 1-6 every two hours, except when asleep, gradually raising the doses to one grain each if relief does not ensue sooner. Continue the drug for at least a month before you decide against it. Keep the bowels clear with a morning dose of saline laxative and colchicine. The presence of bile in the urine calls for the use of a special remedy and for this I would advise boldine, a granule seven times a day, it having proved quite effective in cases where reabsorption of bile has occurred.—Ed.

QUERY 4682:—"Urticaria Following Calcium Iodized." I have seen calcidin save two babies lately. One developed an urticaria the day following. Is this common?

H. W. G., Pennsylvania.

No, urticaria following the administration of calcium iodized is not common, and we doubt very much whether it was the primary cause of the eruption in this case—it was much more likely due to intestinal fermentation. However, it is possible that like other iodine preparations it might cause such phenomena in isolated instances. So far it seems to be the one preparation of iodine which is absolutely free from the unpleasant after effects of that drug and the synthetics.—Ed.

QUERY 4683:—"Vomiting of Pregnancy." Woman, eight weeks pregnant, has constant vomiting. What would you recommend?

F. E. W., Illinois.

The treatment which will cure one woman will not cure the next. We have

had success in curing such cases after everything else had failed and everybody had given them up by the following simple treatment: The woman should remain in bed and somebody should bring her in the morning a cup of coffee, tea or milk as hot as can be swallowed which she should drink *through a bent tube in the recumbent position*. This is important. She should lie perfectly quiet for at least thirty minutes subsequently, then she may arise. Five minutes before rising let her take bismuth subnitrate two grains; cerium oxalate one grain and cocaine hydrochlorate, gr. 1-12 to 1-20; begin with the smaller quantity and increase if it is necessary. The abdomen should be gently supported with a belt, the bowels kept freely open by the use of salines and every precaution taken to keep the woman in as general good health as is possible. In the few cases in which this fails you will find orexine tannate in doses of five grains every three or four hours invaluable. Merck supplies orexoids which are very satisfactory indeed, each containing the proper dosage. Another excellent preparation is validol; fifteen to thirty drops may be given on sugar three or four times daily, but this does not apply so much to morning sickness only as to general vomiting. Try very small doses of hyoscyamine, 1-1000 of a grain every three hours, if it becomes necessary to change treatment from the one we have laid down. The first measures are the ones that are nearly always successful. Impress upon the patient the fact that it will cure her. Do not change the treatment if she should vomit the next day after it is started, but continue and you will win out.—Ed.

Curare taken into the stomach is excreted by the kidneys as fast as absorbed by the stomach and has no effect.—Brunton.

That indolent ulcer will surprise you if dressed once a day with antiphlogistine.

Dysmenorrhea, Amenorrhea, Prolapsus

GENITONE

The best remedy yet devised for the medicinal treatment of the functional derangements peculiar to women; it acts as a tonic to the generative organs and at the same time as a sedative to the nervous system.

When Leucorrhea is present this should be corrected by means of the douche, followed by an Elytrone.

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Are antiseptic vaginal suppositories and contain Boroglycerid, Hydrastine, Thymoline, Zinc Sulphocarbolate and Acetanilid. They are antiseptic, astringent, deodorant and analgesic. Being prepared of finest gelatin, they are cleanly and bring the healing medicines in direct contact with the diseased parts. ELYTRONES—Formula B, are of the same composition as Elytrones, with the addition of Ichthyol.

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Each heaping dessertspoonful contains:

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Tincture Nux Vomica, 6 minims.

In chronic cases one dessertspoonful dissolved in a glassful of water, and drunk while effervescing, should be taken each morning about one-half hour before eating. For the acute attack one such dose may be given every hour until relief is obtained.

AKARALGIA is superior to Acetanilid and to all other coal tar derivatives not only in the certainty of relief afforded the patient suffering from Migraine but also on account of the entire safety with which it may be given to all cases.

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PLEASE MENTION THE ALKALOIDAL CLINIC WHEN WRITING.

THE RECRUITING FIELD OF THE GREAT WHITE PLAGUE.

LA GRIPPE: ITS ALKALOIDAL TREATMENT.

BY W. C. ABBOTT, M. D.

AS USUAL we have had and shall doubtless still have many and unpleasant experiences with epidemic catarrh before the spring weather puts a stop to its ravages for another six months. None too rapidly the serious character of this disease is being recognized and we no longer speak lightly of a case of true la grippe. None too soon, either, has the fact been realized that the coal-tars are the worst possible remedies to use in this disease, except perhaps for immediate relief in some cases in which the importance of the exigency outweighs the danger and the damage that may be done. It is with the idea of impressing these two points more forcibly that we thus call attention to them and what we believe to be the rational method of treating influenza of the epidemic variety.

It may be accepted as a maxim that where the bacillus of Pfeiffer has gained access, there, subsequently, is a suitable field for the tubercle bacilli. We are aware of the frequency with which pneumonia, pleurisy, neuritis, cardiac neuroses and pericarditis follow la grippe; indeed it is the aftermath which is the most to be dreaded and proves most fatal. But do we realize just how frequently the la grippe patient becomes a phthisical subject? Those who have had the widest clinical experience and have been able to follow their cases most closely know that the proportion is fearfully great.

We cannot divest ourselves of the feeling that the treatment generally fol-

lowed has more than a little to do with this state of affairs and we have reasons for so thinking. La grippe weakens the entire system; it affects particularly the cells and mucosa of the respiratory tract. The toxins generated invade the bloodstream (greatly to the detriment of the vital fluids) and it is safe to say that after a severe spell of influenza every organ of the body is more or less damaged. Yet the patient in this condition is too often filled with opiates and antipyretics; the symptoms are smothered and systemic apathy encouraged so that the victim, because he feels less acutely ill, may deem himself first "better" then "well," while the truth of the matter is that he has never been so dangerously sick as at the moment of his discharge.

Anemic, with low vitality, toxin-laden and functioning fifty per cent below normal the "cured" grippe patient is apt to fall a victim to any or every disease; at any rate is prone to and usually does relapse repeatedly, and when a patient has relapsing grip, look out. Hence, undoubtedly the large number of fatalities which are attributed to post-grippal "complications." The bacillus of Pfeiffer is not so deadly a germ in itself but it prepares the field for other and more dangerous invaders in mixed infections and it becomes the business of the physician to recognize this fact and counteract the condition.

To start at the beginning, the man or woman who falls a prey to grip is, in nine cases of ten, generally "out of kilter." The first thing to do with such a



There can be no doubt but that absorption through the unbroken skin of substances mixed with fats takes place.—Brunton.

Gradual decrease in the small lymphocyte count, and continuous low count, form unfavorable prognoses.—Holmes, J. A. M. A.

patient is to render him as nearly normal as may be. He must be cleaned out; elimination must be stimulated and every function must receive attention. Renal and hepatic torpidity is almost invariably present and a blood-count will reveal a marked decrease of the red cells. An examination will disclose various disorders of the urinary chemistry and the exhibition of proper remedies will make it evident that the intestinal tract is teeming with waste toxin-producing matter. To relieve the fever of such a case with antipyrin or to ease the distress with morphine or codeine, and do nothing else, is to commit a serious error. Even the salicylates are out of place save in small doses and as a minor remedy.

The proper treatment of grip is, roughly speaking, as follows: As early as may be, administer a mild mercurial (blue mass one grain or calomel gr. 1-3) every hour until four doses have been taken. The addition to each dose of leptandrin and podophyllin (gr. 1-6 of each) will give better results. One hour after the last dose give a saline draught and repeat this in three hours. You will be astonished at the amount and character of the stools. From the first, exhibit hourly or oftener according to symptoms small doses of aconitine, digitalin and strychnine, adding quinine salicylate, gr. 1-6, to each dose. As soon as the bowels have moved freely the hyperpyrexia will cease to be a feature and the aconitine may be withdrawn. Nuclein in ten-drop doses should be given every four hours and (after the bowels have acted) at least fifteen grains of the sulphocarbolates at the same intervals. Fever being reduced, bowels empty, and in the process of being rendered aseptic the digitalin may be changed for cactin

or the patient receive cactin one, quinine salicylate one and strychnine arsenate one (gr. 1-67) every three hours.

At this stage the specific catarrhal and toxemic conditions should receive attention. Calcium sulphide gr. 1-6 is given hourly, calcidin gr. 1-3 being added to every other dose. This medication with morning and evening saline draughts is continued till all distinctive symptoms have ceased—usually on the third day. If each night one hour before retiring a dram of sweet spirit of niter is exhibited with a glass of cold water, results are better. Nourishment must be of concentrated and fluid form, a little being given often. The patient must remain in a room at 70° F., and should receive a warm sponge bath daily. If an enema is given the first night, so much the better. The mouth and nares should be washed out frequently with a mild alkaline antiseptic solution and the nares swabbed with carbolated vaseline.

The acute stage over, place the patient upon calcidin in tablet, hydrastin one granule and quassin two, these things being taken one hour before meals; after eating order two triple arsenates with nuclein, and morning and night ten drops of the latter absorbed from the buccal mucosa. Thrice weekly have a saline taken on rising and the night prior some mild cathartic—the aloin, atropine and cascara compound is excellent. If there are signs of cardiac weakness cactin may be added to the before-meals medication. La grippe patients treated by this method recover promptly and enter the convalescent stage in the very best of condition.

Be sure your grip patients are well, genuinely well before you discharge them.

Chicago, Ill.



A prevailing now small lymphocyte count with occasional rises, shows some effort at convalescence, bad outlook.—Holmes, J.A.M.A.

Gradual increase in small lymphocyte count with interruptions, shows an uncertain convalescence.—Holmes, J. A. M. A.

